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Sinkiang AI1

GENERAL CHARACTER OF THE SOCIETY

1. General Introduction

The Northwest of China, consisting of the four provinces: Shensi, Kansu, Chinghai, and Sinkiang, part of which is now called the Sinkiang-Uighur Autonomous Region, comprises an area of 1.3 million square miles, (almost a third of all China), in which thirty-six million people live. There are at least four different racial types (Turanides, Sinides, Mongoloides and Tangutides) and more than a dozen different ethnic groups: Eastern Turks or New Uighur (Chin. Wei-wu-erh), Chinese (chin. Han), Chinese Muslims (chin. Han-hui or Tung-kan-hui, Engl. Dungans), Kazakhs (chin. Ha-sa-k'o), Kirghiz (chin. Chi-erh-chi-ssu) Uzbeks (chin. Wu-tzu-pieh-k'o), Tatars (chin. T'a-t'a-erh), Tajiks (chin. T'a-chi-k'o), Western Mongols or Oirats (chin. Ölöt or simply Meng-ku), Sarigh-Uighurs (chin. Tung-hsiang-hui-hui), Shera Yögur (chin. Tu-jen), Monguors (chin. also Tu-jen), Salars (chin. Sa-la), Tibetans (chin. Hsi-fan), Manchu (chin. Man), Sibo (chin. Hsi-po) and Solons (chin. So-lun). The last three ethnic groups, the Manchus, Sibos, and Solons are persistently listed in Communist censuses, although it has been proved that they are non-existent as linguistic units, or as separate ethnic groups. Numerically, the Chinese constitute the overwhelming majority in the Northwest (about thirty million).

While the Turks of the Northwest (i.e. New Uighurs, Kazakhs, Kirghiz, Uzbeks, Tatars and Salars) are rather firm believers in Islam (Mohammedanism), the Western Mongols, Sarigh-Uighurs (the latter are Turks), Shera Yögur, and Tibetans are faithful Buddhists of the northern form, also called Lama Buddhism, and the Chinese believe in a variety of religious or philosophical systems: Confucianism, Taoism, Buddhism, and even Demonism and Animism.

The economic pattern of the Northwest as well displays an enormous variety; we find nomadic pastoralism among the Kazakhs, Kirghiz, Western Mongols, and Tibetans, intensive horticulture among the New Uighur of the oasis-belt of Sinkiang, agriculture by means of irrigation (kariz system. See chapter about agriculture) among Chinese (only fifteen percent of the North west agriculture is without any irrigation), sedentary Turks and Mongols, and a mixture of primitive agriculture and pastoralism among some Tibetan and Mongolian Tribes of Chinghai and Kansu. The Turkic and the Chinese Muslims are the bearers of the trade along the old "silk roads" of Sinkiang, Chinghai and Kansu. The urban centers of the Northwest are also centers of petty industry and handicraft. The newest

preclude their enjoying any great influence.

The Salars' pattern of social life follows the Islamic form. Patriarchy rules the extended family, whose members' main occupation is agricultural work. However, agriculture goes hand in hand with trade, which plays also a noticeable role. As a group, the Salars are economically unimportant since they form only a small Turkic tribe.

The Sarigh Uighurs:

The Sarigh Uighurs, the so-called Yellow Uighurs, are a small tribe of Turkic origin which is becoming extinct. Although immediate neighbors of the Chinese, they never learned agriculture, and remained herdsmen. Nowadays the Sarigh Uighurs are mostly hired shepherds of Chinese cattle owners. Frequently one also finds them as laborers on Chinese farms. An occasional Sarigh Uighur family owns a few cows, sheep, and horses. The smallest and the only social unit, is the patriarchal family.

The Shera Yögur:

The people belonging to this small Mongolian tribe, rapidly becoming extinct, are semi-nomadic herdsmen. The old Mongolian clan-system is still preserved. Clan exogamy exists and the migrational units are the single clans. The economic centers, however, are their Buddhist monasteries, for it is the monasteries who own the herds and not the individual tribesmen.

The Monguors:

Ethnically consisting of Mongols, Turks, Tibetans, and Chinese, speaking an old Mongolian and Tibetanized dialect, the Monguors are the only Mongolian tribe of the Northwest that shifted successfully from nomadic pastoralism to farming. They learned farming and the use of their agricultural tools for raising barley, wheat, peas, potatoes, etc., from the Chinese. However, livestock still plays an important role as the second inportant economic resource. While sheep, cows, mules, and pigs are economically important, horses are bred only because to own horses is a mark of prestige.

The basic social and economic unit of the Monguors is the extended family which is patrilineally and patrilocally oriented. The grandfather and great-grandfather enjoy authority over all members of the family. Property is collectively owned.

The families belong to a clan which is headed by a chieftain whose Chinese title is T'u-ssu, who is at the same time a Chinese official. Originally the clan chieftain was simply the head of a number of extended families, whose migrations he directed and whose highest duty was the military protection of the clan through organization and training of the men. Later

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132 it is 37.9 degrees , and at Urumchi it is 39.4. Because of its topographical conditions, the range at Turfan is greater, amounting to 40.8 degrees Centigrade. At all the stations, the yearly range of temperature is above thirty degrees. As to daily difference, the temperature varies more than twenty degrees. This is particularly true in summer when the earth absorbs heat and loses heat more easily.

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132 Rainfall is meager throughout Northwest China. Generally, it is below 250millimeters. According to some data of the western stations of Kansu, Chang-yeh District has ninety-five millimeters; Chiu-ch'uan has eighty-one millimeters; Tun-huang has forty-six millimeters. The farther inland, the more obvious is the continentality and the less is the precipitation. Summer is usually the period of maximum precipitation. In Chang-yeh District the maximum precipitation is in July, August, and September. They have almost constantly seventy-four percent of the rainfall of the year, whereas the winter months, December, January, and February, have only five percent. The rainfall of the summer months in Chiu-ch'uan is approximately seventy-two percent of the year, but it drops to five percent in the winter months. The variations of the rainfall of Kansu Province are generally above forty
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[241] percent, an amount definitely insufficient for agricultural usages. Irrigation in Kansu depends mainly on melting snow water from Ch'i-lien-shan rather than rainfall.

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132 Sinkiang is located approximately in the center of Asia.
[131] Blocked by the huge mountains and gigantic desert, the moist air from the ocean can hardly move into the area so the atmosphere is dry, except in the northwestern section of the province where the topography is relatively open toward the west. When the western winds are strong, moist air is moved into the province. Rainfall is, therefore, heavier. According to the statistics, the mean precipitation is 229 millimeters at Urumchi; 280 millimeters at Ili; 274 millimeters at Chuguchak; and 149 millimeters at Altai. In southern Sinkiang all the stations are separated from the ocean by huge mountains and rainfall is light. For this reason, Kashgar receives only eighty-six millimeters precipitation a year; Kucha receives seventy-six millimeters; and Turfan receives twenty-
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[161] nine millimeters. Charklik (Erh-chiang) has only 4.5 millimeters in a year. It has been reported that in the Han Dynasty there were a thousand families living in the district. In 1943, there were only three families with some eleven persons remaining. The meagerness of precipitation through the years and the encroachment of the desert are the major causes for the rapid decrease of the population in Charklik. In some

S 132 places not even as much as 4.5 millimeters falls through the year. There are no longer a series of records showing either the temperature or the precipitation of the area, but the available data show that the total precipitation consists of snow water as well as summer rain in certain parts of the province.

N 132 In the geographical distribution of rainfall there shows a marked contrast between the shady side of the mountainous areas and the oases. On the whole, the southeastern part of Kansu and Shensi receive a relatively greater rainfall than the northwestern sections. For instance, Wu-wei district, in the southeastern section of Kansu, has a comparatively high precipitation, and Chiu-ch'uan, because of its location in the northwestern section of Kansu, has a precipitation that N [241] is relatively low. The former is considered an area of agricultural dominance; the latter, due to less precipitation, makes for agricultural uncertainty.

Because the warmer southern air has been blocked by the Nan-shan and Chin-ling on the southern border of the region, the temperature of Kansu and Shensi is relatively lower than those places in the same latitude in eastern China. For instance, the January temperature in Peking is minus 4.7 degrees Centigrade; in Chiu-ch'uan it is about minus nine degrees Centigrade. In July the temperature in Peking is 25.3 degrees Centigrade, whereas in Chiu-ch'uan it is 23.8 degrees Centigrade. This is due not only to the influence of location - one near the coast and the other inland - but also to the fact that the mountain range runs from west to east as the barrier which shuts off the warm, moist winds from the southeastern coastal areas of China.

S 132 Furthermore, the distribution of precipitation of Sinkiang differs from south to north of the Province. The mean annual precipitation at Kashgar is 89.4 millimeters of which over two thirds, or around seventy three percent, falls in the spring and summer. At Urumchi it is 228.8 millimeters, of which twenty-four percent falls in winter; thirty-four percent falls in spring; fifteen percent falls in summer; and twenty-seven percent falls in autumn. At Kashgar the precipitation is greatest in summer and at Urumchi it falls largely in the spring and autumn months. The Takla Makan desert absorbs the limited moisture from the air. However, in northern Sinkiang the topographical features are comparatively open so that the Arctic Oceanic winds blow toward the area more easily. Thus precipitation is evenly distributed throughout the year.

S [241] The dry air reduces cloudiness and thus increases sunshine. The agricultural activities of the area depend largely upon the brilliant sunshine for melting snow on the mountains for irrigation.

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GEOGRAPHICAL BACKGROUND

I. The Physical Setting

A. Location and Importance.

13 Lanchou, the capital of Kansu, is the geographic center of China. If one draws a horizontal line from west to east and a vertical line from south to north, he finds that the northwest quarter of China just covers the whole area of Sinkiang, Kansu, and Chinghai or Koko Nor. Owing to scanty rainfall, a great part of the area is a vast desert, dotted with oases and strips of cultivation, It is generally classified as the interior continental desert and steppe region of China.

771 From the viewpoint of geographic location, Northwest
184 China, especially Kansu Province, is a transitional zone of cultural variations. Religions, for example, are different. From Kansu northwestward to Sinkiang, the majority of the inhabitants are Mohammedans. Contrarily, southeastward to China proper, there is more Buddhism and Christianity.

241 Again, Kansu furnishes a natural boundary for economies.
233 From the eastern end of Kansu southeastward the area is
182 mainly agricultural, while the area northwest from Kansu is largely a pastoral region. People there are adapted to a nomadic life with a relatively self-sufficient economy. As a result, the trading activity is small. It is limited to a small village or an isolated oasis.

131 The area is adjacent to the Mongolian People's Republic on the north and northwest and the Tibetan Plateau on the southwest. Moreover, it lies in the path of direct communication with Soviet Russia through the narrow plain of the Kansu Corridor by way of Sinkiang in the extreme northwest. It is an important part of China as a strategic pivot linking Asia and Europe and it is the great joint between Inner Asia and the Pacific coast.

B. Surface Features.

133 The physical features of northwest China generally may be classified as plateaus. However, viewed in terms of the present relief of Kansu, the high lands are all located along the southern border of the province. They are generally called the Ch'i-lien-shan, the Nan-shan, or the Southern Mountains. This mountain range forms the natural boundary between Kansu to the north and Chinghai to the south. There are a few passes situated in this mountain range with an average height of 12,900 feet. The length of the Chi-lien-shan is roughly estimated at 570 miles. Its east end is dissected by the streams of the upper Yellow River into a few isolated

133 mountains, notably the Chin-ling and Mei-chang, forming the boundaries of southern Shensi and northern Szechwan. Water separates the low lands between the mountains, and there are several notable basins such as Han-chung Basin. Except in the Chin-ling section, the mountain range is rather bare and has little vegetation. The slopes along the Chi-lien-shan are strewn with pebbles, stone debris, and red deposits of the gravels. Valleys form vast corridors several miles wide between the mountain ranges. In the central area, where the topography is more level, pebbles, sand dunes, pastures, and swamps appear. The Chi-lien-shan region is suitable primarily for a grazing economy. However, most of the flat [241] land in the valleys has been opened for agricultural use. Spring wheat, millet, linseed, and colze are grown nearly everywhere in the region and form the major foodstuffs of the people.

The Chi-lien-shan is the major mountain range in this section [103] of Northwest China. It has received various names. The eastern end of the range is called the Liu-pan-shan or the "six coil mountain." The upper Yellow River cuts a gap through the links of the mountain range so that the Liu-pan-shan is an isolated mountain from which the Yellow River runs north and northeastward. The Wei River, one of the major tributaries of the Yellow River, runs along the south edge of the Liu-pan-shan eastward to Shensi Province, along the northern piedmont of the Chin-ling-shan eastward to Shensi Province, along the northern piedmont of the Chin-ling-shan. North of the Wu-sha-ling, or Dark Sand Peak, 120 miles northwest of Lanchou, a narrow strip of land extends along the northern foot of the Ch'i-lien-shan. From here westward, the land is relatively flat and plain. This area is called the Kansu Corridor. It is the important passageway to the Northwest of China.

All streams, as well as meltwater, come down from the Ch'i-lien-shan and run toward the north or northeast. Some streams disappear into the desert after a short distance. This is the case almost everywhere in Northwest China. This is one of the main reasons why agricultural products cannot be evenly distributed and dependably developed in the area.

Geologically speaking, the Tertiary formation appears in a number of basins in Kansu Province. The beds are generally composed of red clays, conglomerates, red sandstones, and gypsum. The geological structures remain the same to the mountain ranges of both the north and the south, the Ch'i-lien-shan and the Ho-li-shan, which is submerged into the Mongolian Gobi and the semi-steppes. They are mainly composed of Silurian and Devonian structures resting unconformably on older

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Major Regions	Population (1953 Census)
Southwest China	98,193,000
Northwest China	35,358,000

In the distribution of population densities, the Northwest is not comparable with other major regions except Tibet and the Inner Mongolian Autonomous Region as the following indicates:

Major Regions	Average Density per Sq. Mi.
Northwest	28.6
North	623.0
Northeast	214.0
Central and South	400.0
Southwest	222.0
Tibet & Shangtu Area	3.0
IMAR	17.0
Whole country	160.0

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162 Of the 35.3 million people of the Northwest, 28.8 million are found in the provinces of Shensi and Kansu, only 6.5 million in Chinghai and Sinkiang. This contrast between the true Han-Chinese occupied eastern part and the multi-minority peopled western portion is sufficient to portray the unevenness of the population distribution. It becomes even more obvious when
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131 this distribution is expressed in ferms of the size of the land
161 occupied. Shensi and Kansu, including Ninghsia, have an area of 313,801 square miles which gives an average density of ninety-one persons per square mile, while Chinghai and Sinkiang have an area of 1,010,000 square miles with a density of 6.5
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131 per square mile. The density of the eastern portion without
161 Ninghsia would be increased to 126 persons per square mile, for Ninghsia has at most 800,000 people in an area of about 91,500 square miles. However, the larger density of Shensi and Kansu without Ninghsia is still below the average of the country.

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161 Broadly speaking, apart from the general uneven distribution between the eastern and western parts of the region, their
• 24 distribution displays a special pattern. To the southeast of Nan-shan and Alashan mountain ranges and within the mid-drainage of the Yellow River and the Han-chung Basin, people are concentrated in the fertile valley plains where irrigation is possible, and also in the terrace dry lands of the Liu-pan hills where the annual rainfall is generally below fifteen but above ten inches which, though hardly adequate, is sufficient for growing millet, kaoliang, and even some spring wheat. Population
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161 is spread out more evenly in large expanses such as the Han-
133 chung Basin, Wei-ho valley plain, and around Lanchou, a confluent basin where the Tatung, Huang-shui and T'ao-ho converge on the Yellow River, or in long stretches as in southeast Ninghsia between the Alashan Range and the Yellow River course.

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*563 631 6) Muru Dzasak, 40 families, (Tafel: Da-tung Dzasak)
7) Charagolchin Dzasak, 4 families (Tafel: presumably Damba Dzasak)
8) Baga-nor Dzasak, 1 family (Tafel: ?)
9) Khalkha Dzasak, 3 families (Tafel: ?)
10) Tsunkuk Dzasak, 60 families (Tafel: probably Tsinkuk Gung)
11) Barun Dzasak, 280 families (Tafel: Barun)
12) Tsun Dzasak, 300 families (Tafel: Dzun)

3. Probable extinction

*563 [162] [199] According to M. Hermanns, the total population of the Chinghai Mongols does not exceed 18,000 people. Since the Mongols of the Chinghai region have very few children - two at the most - and since sinification as well as Tibetanization appears to be rapid, the extinction of the Chinghai Mongols is to be expected in the near future.

IV. The Tibetans of the Northwest

A. General Characteristics

The province of Chinghai is inhabited by sixty-six Tibetan tribes, called by the Chinese "tame" in contrast to the "wild" tribes inhabiting the Kokonor region.

Lattimore and Father Schram point out that the Tibetan tribes easily subdivide into new tribes which observe strict clan exogamy. The Tibetans are Lamaist-Buddhists of the Yellow Hat Sect in the northern districts and of the Red Hat Sect in the southern districts. *563 701 795 Shamanism is also still existant among the Tibetans. Some Tibetans living in the district of Hsün-hua have become Moslems.

B. Physical Characteristics

*563 142 The Tibetans belong to a race which is called protosinide. Their characteristic features are: middle to tall stature and very muscular. The legs are considerably longer than the legs of the Mongoloids. The color of the skin is light brown and the facial skin copperish red. The lips are thin. The nose is long and prominent. The head is large and long. Round heads appear only among the Ngo-loks. The face shows a sharp relief. Usually they lack the Mongoloid eyefold. Eye color is generally brown. Body hair is considerably stronger, thicker and denser than among the Chinese or Mongols.

*563 241 233 C. Economic Activities

The Tibetans are either nomads who breed yaks and sheep or farmers who cultivate oats, peas, wheat, cabbage, and turnips. They use the same agricultural tools as the Chinese farmers.

/The Sedentary Tibetans/

+563 62 [622] [623] [632] [792] There is more rigidity about the village organization. The sedentary Tibetans generally have a formally selected village headman. But again the council of elders has considerable authority. Groups of villages are organized into a larger unit, nor is it uncommon for villages and encampments to be joined together in such a larger unit. A monastery is more apt to have authority over a group of villages than over the strictly nomadic people. However, like the nomads, the sedentary [622] Tibetans give very little recognition to any authority beyond that of the ecclesiastical or lay chief of the "tribe". Ma Ho-t'ien, in his Diary of Travels in the Border Region of Kansu, Chinghai and Tibet makes frequent reference to the inability of the Chinese officials to exert any sort of authority over the border-Tibetans and other sources also record the absence of any effective government beyond the local level.

The village itself represents a very tightly-knit organization, economically and politically, as well as physically. [423] Houses, housesites and the fields belong to the individual families, but the grazing lands and forests are community property. Use of the pastureland is available to all, but the village may place certain restrictions on the quantities of timber that may be taken for specific purposes.

+563 62 • 241 [787] [292] Just as the nomads act simultaneously in moving their encampments from one site to another, so the sedentary Tibetans also insist on simultaneous group action within the village. The first day of spring planting, determined by horoscope, sees all the villagers proceeding to their individual fields in their best clothing. The fields are ploughed simultaneously. The seeds are sown at the same time in each field. And, when harvest time comes, all the fields must be completely harvested in the time that it takes the smallest field to be harvested with a small hand sickle. If one's fields are too large one hires extra help. During the course of the growing season all the villagers periodically parade through the fields carrying the holy books on their heads. These communal activities have both religious and economic bases. [787] From the viewpoint of the religion, if the days have been selected as auspicious, they are auspicious for the community's members as a whole. It is when the spirits of the ground, [776] the demons of hail and misfortune can be allayed or propitiated [782] that determines the best days for performing the needed tasks. From the viewpoint of economics, when the ground has been plowed and the seeds planted, the fields are encircled by a community fence to prevent onslaughts by roaming animals. [625] A community watchman also stands guard. It also means that [486] the villagers can collect a tax from caravans that pass through [651] their lands. Once the fields have been harvested, the community

/The Sedentary Tibetans/

fences and the watchmen no longer function and it would be foolhardy to leave crops standing.

Within the household, the composition is similar to that of the nomadic tent, although there may be less non-kin hangers-on and a higher frequency of joint-family occupancy. Should the family be a polygynous one, the wives will live in the one house, instead of each having her own. In some cases, the actual family may be divided into nomads and farmers with full occupancy of the house occurring only during the winter season. When this happens, usually the father and one son care for the herds while the other sons remain on the farm. Upon the death of the father, the properties (i.e., the herds and the fields) are no longer kept together and the fission of the family occurs.

C. The Mongours

At least until 1949 Mongour social organization retained a reflection of the land allocated by Chingis Khan to his sons, brothers and leading generals. As may be seen clearly in Monguor social structure, the definite differentiation between nobility and subject population resulted from these allocations. The nobles are very much concerned with their claims of descent either from the imperial family or from other noble "founding ancestors" whereas the commoner population shows little concern with its genealogical pattern. However, the subject population is closely related to the noble rulers, in a way that was partly tribal but later became feudal.

Each noble was obliged to furnish a definite number of troops depending on the size of the territory and the population of which he was the nominal head. It appears likely that the Monguor social groupings began to form as early as Yüan and Mongol rule. Generally speaking, the Monguor commoners are descendants of families that were already subject commoners in the Mongol period, with later additions of families of Chinese and Tibetan origin. There are 17 Monguor clans and four general types of clan leaders. Some of these clans were originally formed by descendants of the Yüan dynasty (Ch'i and Lu clans), and others by military commanders, who though commoners by birth, were given subject families to rule over, as a reward for their services.

Each genealogical register of the clans starts with the appointment of a T'u-ssu, (the office of the T'u-ssu, clan chief, being elective or hereditary). The present rank of T'u-ssu was first created by appointment in the Ming dynasty. Each T'u-ssu, with his offspring, forms a unit known as his "bone." Since primogeniture prevails in Monguor social organization, the oldest son of the T'u-ssu inherits the clan leadership after his father's death.

/The Monguors/

000kitchens."

N *563 M 60 59 . For all members of the same generation, the Monguors use the same term differentiating according to sex. The extended family provides a framework of social support for the nuclear family, the latter consisting of a father, mother and their children. Adoption of sons by childless couples is practiced.

N *563 M 565 582 614 Exogamy is the first rule of marriage and is strictly observed among the nobles. There are no marriages between nobles and commoners in the clan, since all individuals bear the same clan name. However, there are exceptions to this rule, especially when the clan structure breaks down. The status of the wife is inferior to that of the husband. Relationship between two families connected by marriage is clearly seen in the special role of the maternal uncle, who has a powerful influence over his sister's child and over the family into which his sister's child is born.

N *563 M 421 The basis on which Monguor property is divided is that fact that, under the patrilineal system, the entire extended family is the owner of fields, cattle, houses, agricultural implements and money. Individual property is restricted to a few personal possession. The sons of a man who has died, are entitled to receive and divide their father's share.

N *563 361 III. Relationships between the Chinese, the Chinese-speaking Moslems, and the Sedentary Tibetans

Agricultural Chinese, Chinese Moslems and sedentary Tibetans all live in villages for the sake of protection and in accordance with a tradition of settlement that is continent-wide and probably older than history. The area is typical of the farming economy that is found all the way across the northern half of China. The crops are the same and the manner of life is similar. The villages, whether Chinese, Moslem or Tibetan, are alike not only as to spatial characteristics but as to their function in the social organization. The counties may be administratively divided into districts, "roads", or "directions", but the basic unit of control is the village, with a village head-man who is largely responsible for the maintenance of law and order and for the observance of government regulations. The larger villages have their own "family protective associations" and organized units of the militia. The smaller ones have no such organization, but are recognized by the county administration as self-administering units.

N [171] [241] N *563 621 [631] [622] N [701]

N *563 621 631 It is not clear whether there are such intermediate divisions as hsiang, chen and chü between the villages and the county organizations. It seems probable, however, since the National Government has put the Northwest provinces under an administration system similar to that of other provinces. In practice, such divisions

/The Tibetans/

*563 [197] race, the Hsi-fans of the country west of T'ao-chao speak the Tibetan language and are as much Tibetans as the inhabitants of any other portion of the Tibetan plateau. They come into contact [177] with the Koko Nor Mongols farther north, whom they bully and plunder. Unlike the Mongols, who are being pushed back every- [648] where along the northern borders of China by Chinese agriculturalists, the Tibetans of the Kansu border hold their own [181] against the Chinese colonists. The northeastern Tibetans are truculent and independent as compared to the Mongols, and they take readily and successfully to farming.

There appear to be two physical types in Tibet, the short, [142] round-faced Mongoloid type, and the tall Aryan type with prominent features. The latter type is common among the Tibetans of [291] Amdo. The eastern Tibetan, even though he is in Chinese dress, [179] may be readily recognized by his peculiar habit of standing with [516] his feet turned out at right angles to his body.

On the whole, these people are hardy, independent, and cau- [181] tious with strangers, but they are also notably hospitable.

2. Patterns of living

*563 a. Dwelling

342 Like all nomads, the Tibetans have no fixed homes. They live in rectangular tents usually made of yak hair instead of felt, with wooden framework. The bottoms of the tents are made fast with iron pins or animal horns. Mud, stone or dry dung is built up around the tent to keep off wind and snow.

*563 The interior arrangement varies little from tent to tent. A 342 mud stove is in the middle, a Buddha image at the left side. On 352 wooden shelves along the walls are chests and boxes where food 353 and clothing are stored. Skin bags of butter, tsamba or flour, and saddles and rifles also hang along the walls. Shelves on the right side hold pans, water buckets, kettles, bowls, cups, a [237] stone mill and a few skin bags. Near the door there is usually a [372] heap of dried ox dung for fuel.

b. Food

*563 Farm products do not grow in the cold climate and high alti- 262 tude, and transportation is difficult. Thus there is little variety [241] in foodstuffs, and eating and drinking are simple functions. The [489] daily fare is beef, mutton and other domestic meats, fresh and sour milk, butter, cheese, noodles, tsamba (parched barley meal) and tea.

*563 There are no regular meal times in most households. In 264 winter when the days are short, they may eat three meals a day; in spring and summer, perhaps four or five. During the day they [262] eat tsamba and sour milk. The evening meal is noodles with boiled beef or mutton, though the poor can have noodles and beef less often.

Rich and poor eat with their hands, though the Tu-kung (chief

/Chinese, Chinese Moslems and Sedentary Tibetans/

181 use it. In this little backwater town large business deals were
436 effected, but each roll of dollars received for payment was opened, the contents carefully examined, and the individual coins valued a little higher or a little lower according to the Tunhwang standard." (pp. 69-70).

423 The landowners in the Tunhwang district are mainly Chinese whose ancestors were established here very long ago. The Chi-
181 nese farmers are more conservative than the town folks. The rural
369 rural pattern here is different from that of other parts of the North-
241 west. Here the farmsteads are dotted over the area, each standing
361 in the center of its own land and each at a considerable distance from the other. The larger farms are surrounded by a high wall
(351) which is a small fortification, and inside the wall is a substantial
(342) house made of sun-dried bricks and excellent timber. Most of
(621) the farmsteads are spacious and built to accommodate large num-
(614) bers of people, for it is customary that all the members of a clan live together in their generations.

631 The author of The Gobi Desert recorded another interesting feature of the Tunhwang oasis. The record says that Tunhwang is divided into as many sections as there are prefectures in the whole of the province of Kansu. Its colonization brought men from all areas, who were anxious to honor the cities which they represented, by erecting temple buildings. The result is that the traveller wanders through the oasis as through a replica of the whole province of Kansu, stepping from the section called after the town of Chingchow to that called Liangchow, from Kaotai to Pingfan, or from Pingliang to Titao, in the course of an afternoon
(532) stroll. Near one of these temples was a very old carved stone
(172) figure of a man, which was not an idol but was said to represent a historic personage.

157 Of the Chinese people of the wayside in the Gobi Desert
485 Miss Cable writes: "The intense isolation of the inhabitant of a
(511) small oasis, and the extraordinarily low standard of life imposed upon him, produce a strange mentality. His normal condition is torpor. He sits or lies on his mud bed and thinks of nothing. Only when a traveler arrives does he experience the discomfort of rousing himself, but then though it may be cold or windy, he must leave the pleasant stuffiness of his bed-living-room, throw off the greasy coverlet which he has drawn over his crossed legs, come into the open and give the service, which is demanded of him as innkeeper. The life of the innkeeper's wife is more bare and poor. Clothing, which has some place in the thought of nearly every woman, is, to her, absolutely nothing but a protection from cold and a covering for her nakedness. The other incidents of her life are concerned with food and the birth of her children. She knows that her husband has some money, but she has never thought of money as a means of securing comforts

132 variable, thus making agriculture hazardous. The growing sea-
(241) son is short, with about five frost free months; even the few crops
that can be grown are often injured by autumn frosts. Dark colored
134 chestnut earth is common only on the higher parts of the loess
plateau of Shensi and Kansu provinces. It also occurs in the high
plateau region of Chinghai Province. In the loess region most of
the well-developed dark chestnut earth has been buried under
recent loess and alluvial deposits. (T. H. Shen. Agriculture
Resources of China, p. 20.)

2. Agriculture

241 Important irrigation systems, made possible by the Yellow
312 River and its tributaries, have been developed in Kansu, Ning-
hsia, and Shensi. All these irrigated areas except Shensi pro-
duce one crop a year, such as wheat, millet, peas, or flax because
the growing season is short. The large irrigated plains in Shensi
along the Wei River, a tributary of the Yellow River, produce
good American upland cotton in addition to wheat, corn, and mil-
let. The largest irrigated area is in the Ninghsia plain where
there are twenty-five canals from the Yellow River maintained
by the provincial industrial bureau. Irrigation is only possible
in the valleys, but they are narrow and comprise but a small per-
centage of the total cultivated area. When Buck made his survey
of this area in 1929-1933, he estimated that thirteen per cent of
the total cultivated land was irrigated. He felt that the extent of
irrigation sometimes depended upon the prices of agricultural
(651) products fell. Because taxes were still imposed on irrigated land
and some of these taxes had even increased, further construction
of irrigation works was abandoned until prices commenced to rise
again.

137 The vegetation of this region is distinguished by the xerophytic
plants, bunch grasses on the high elevation, and the tall and short
grass sod. In Chinghai province, the Tsaidam Basin is charac-
terized by desert and weeds while in the same province, in the
vicinity of Kokonor, there is grass. In Kansu, along the foothills
and in the mountains, grass and weeds exist while in the desert
area of Ninghsia, only weeds grow. Grass grows in Shensi along
the Chin-ling and Huang-lung mountain ranges.

241 There is an inadequate amount of green manure crops used in
this region, which has resulted in a shortage of organic matter and
a deficiency in plant nutrients, especially nitrogen. In most of the
(372) area, straw of rice, wheat, rape, and legumes are not ploughed
under but are used for fuel, decreasing an important source of
organic matter to the soil and removing minerals necessary for
plant growth and crop production. Application of chemical fertil-
izer in addition to local manures and the plowing under of plant
residue is very necessary to soil fertility.

241 311 131 423 The following chart indicates the area of the four separate provinces, the amount of cultivated land, the number of farm households, and the average number of acres per farm. (Cressey, p. 105).

Province	Area in Acres	Cultivated Land	Farm Households	Acres per Farm
Kansu	96,741,133	4,310,000 acres	793,000	5.4
Ninghsia	57,653,372	304,000 acres	54,000	5.6
Shensi	46,432,319	7,514,000 acres	1,385,000	5.4
Chinghai	164,874,016	1,284,000 acres	237,000	5.4
Total	365,700,840	13,412,000	2,469,000	

Of the total area of these four provinces, roughly thirteen per cent is under cultivation (1946 figures). A survey of the National Agricultural Research Bureau findings of 1943 indicates that additional land that could be brought under cultivation is, except for Ninghsia, extremely limited. (China Handbook 1937-1943, p. 547.)

241 31 133 132 The extent of cultivation on the hills of this area depends upon the elevation, steepness, and the dryness of the climate. High elevations have a greater precipitation, more favorable for farming. The drier, steeper hills have sparse, wild vegetation growth only; used for sheep grazing. Although one is impressed with the degree to which such hilly land in this dry climate is cultivated, it is probable that it has extended beyond the most profitable use of the land. In fact, according to one agricultural economist, it might be more economical if more of this land were devoted to grazing; if better varieties of grasses and improved breeds of sheep were introduced, the income derived from pastoral utilization might be greater. (T.H. Shen. Agriculture Resources of China. p. 153.)

241 133 134 Terracing is prevalent and is practiced on eighteen per cent of all cultivated land. Much of the hill land is also cultivated in a modified form of contour farming. The slopes of the fields are so steep and the fields so wide that although there is some attempt at contour farming, it is not well carried out and the erosion is very severe; in fact, erosion is so serious that production is meager and some of the land has been abandoned.

241 The principal crops grown are wheat, cotton, rice in the irrigated areas of Wu-wei and Ninghsia, millet, and Irish potatoes. Cotton production is particularly extensive in Kansu and Shensi. The following figures are from the China Handbook (1937-1943) and they show the acreage and production for 1937-1942.

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AGRICULTURE PRODUCTION

PROVINCE	CROP (Maize, barley, oats, etc. excluded)	ACREAGE IN 1,000 MOU (1 ACRE = 6.6 MOU)					PRODUCTION IN 1,000 PICULS (1 PICUL = 2 BUSHELS OR 133 1/3 lb)				
		1938	1939	1940	1941	1942	1938	1939	1940	1941	1942
KANSU	WHEAT	8,055	8,359	8,434	8,330	8,247	10,331	9,424	8,953	8,411	9,077
	COTTON (lint)	123	141	167	202		37	41	51	57	
	RICE (not glutinous)	50	66	72	69		127	152	141	157	
	MILLET (excluding proso millet)	2,326	2,126	1,967	1,947		3,667	2,949	,510	2,817	
	SWEET POTATOES	116	182	184	184		1,399	1,273	1,236	1,214	
NINGHSIA	WHEAT	337	360	379	396	409	394	558	514	522	594
	COTTON		7	8	8			1	1		
	RICE	79	83	91	95		104	108	77	102	
	MILLET	220	198	227	226		341	329	341	359	

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following page 642

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AGRICULTURE PRODUCTION

PROVINCE	CROP	ACREAGE IN 1,000 MOU (1 ACRE = 6.6 MOU)					PRODUCTION IN 1,000 PICULS (1 PICUL = 2 BUSHELS OR 133 1/3 LB)				
		1938	1939	1940	1941	1942	1938	1939	1940	1941	1942
CHINGHAI											
	WHEAT	2,444	2,356	2,319	2,427	2,409	3,501	4,096	3,030	3,641	3,797
	MILLET	260	273	215	231		254	447	205	285	
SHENSI											
	WHEAT	14,853	15,827	16,642	17,034	18,060	28,134	23,908	22,057	16,876	23,373
	COTTON	3,895	3,187	3,671	3,590		997	862	670	945	
	RICE	1,090	1,026	887	789		3,236	3,212	1,965	1,960	
	MILLET	3,363	2,975	2,698	2,678		3,879	4,163	3,226	3,658	
	POTATOES	353	342	336	337		3,759	3,132	2,818	2,530	

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following page 642 (a)

241 433 Oil seed bearing crops are also raised but in small quantities compared with the output from other parts of China. One reason for this is the lack of markets with a resultant slight incentive to expand and promote the planting of oil seed bearing crops. The following figures are in 1,000 metric tons and 1,000 hectares and are an average for the years 1931-1939. (T. H. Shen. pp. 248-249.)

Province	Soybean	Peanuts	Sesame	Cottonseed	Rapeseed
Ninghsia	2	-	negligible	-	1
Chinghai	-	-	-	-	21
Kansu	38	negligible	negligible	5	25
Shensi	46	12	17	86	51

Acreage in 1,000 hectares (1 hectare = 2.471 acres)

Province	Soybean	Peanuts	Sesame	Cottonseed	Rapeseed
Ninghsia	2	-	negligible	-	31
Chinghai	2	-	-	-	34
Kansu	38	negligible	1	13	54
Shensi	56	9	38	267	141

Besides the geographical and climatic limitations to farming, insects, diseases, and rodents seriously limit crop production. The black smut of wheat, barley, millet, proso-millet, and kaoliang is reported to cause losses of from twenty to eighty per cent of the crops. Yellow rust of wheat causes a loss of twenty per cent. Leaf cur of tobacco at Lanchow in Kansu decreases the yield and affects the quality of the crop. A kind of marmot, locally called the "yellow rat" was a great menace during the drought years 1928-1931. [136] [731]

241 731 The region is frequently subject to earthquakes, droughts, and famines which make farming extremely precarious. Calamities destroyed twenty per cent or more of the crop on the average annually during the period 1904-1929 and in 1930 a great famine swept through the region. Yet according to the population statistics and the total land area, there is no problem of population pressure, at least relatively. In addition, there is the possibility of increasing returns from the land under cultivation if existent farming techniques were improved and innovations introduced, i.e., use of fertilizer, better irrigation facilities, better seeds, etc.

241 489 10 But the biggest factors preventing increased returns in the Northwest have been the absence of transport facilities and financial assistance; e.g., the inability of the Nationalist Government to provide extensive loans at low interest rates. J. L. Buck points out that the absence of transport and communications to link the Northwest with other parts of China has accounted for the very small quantities of livestock and agricultural produce which have been exported and has hindered the development of local markets. With the growth of transportation, communications, better market facilities, etc., the possibility of increasing returns to agri-

241 489 culture on land already under cultivation might be realized.

The Nationalist Government gave no financial assistance of any magnitude until the Second World War. Finally, when it was 241 654 forced to retreat into the remote areas of Southwest China, the 175 government had to depend largely on the Northwest for food and revenue (agricultural taxes). The Nationalist Government became more interested in the agricultural development of the Northwest and some experimental stations were set up in Kansu. Government assistance, however, was directed primarily to farmers engaged in producing crops for the war effort; e.g., cotton.

241 After 1938, the price index for farm products rose rapidly in 175 all four provinces and the purchasing power of the farmers began [435] to grow. After 1940, food prices rose speedily and the farmers had more money than in prewar days. By examination of the [433] data of the war years as to whether farmers undertook to increase their scale of production and thereby extend cultivation, we can say that there was little increase in extensive farming (except in the case of Ninghsia) and that the output increases during this period can be attributed (wheat especially) largely to intensive farming.

241 Turning to the land tenure system, the percentage of farmers 423 who are owners, partowners and tenants, as determined by a land survey undertaken by J. L. Buck, reveals that on the average most of the farmers own their own plots of land. The following [175] chart, compiled from data collected by Buck in 1933 on a sample basis gives us the landholding breakdown. In Farm Survey (a), [429] farmers who own their farmsteads but who rent all their crop land are classified as tenants rather than as partowners. When compared to the agricultural survey (b), (in this survey, 236 localities, 146 hsien, and twenty provinces in China were examined), the results in both cases are similar except in the case of Chinghai where the few samples taken disallows an accurate breakdown. (Land Utilization in China p. 57.)

241 Percentage of farmers who are owners, partowners and tenants

Province & local	Farm Survey (a)			Agricultural Survey (b)		
423 427						
Kansu	owner	part-owner	tenant	owner	part-owner	tenant
171 Kao-lan	86.0	11.0	3.0	60.0	15.0	25.0
Lin-hsia	-	-	-	60.0	10.0	30.0
162 Wu-wei	96.0	4.0	0	60.0	25.0	15.0
Yung-teng	-	-	-	35.0	5.0	60.0
Ping-liang	82.0	17.0	1.0	85.0	10.0	5.0
Tien-shu	62.0	21.0	17.0	50.0	30.0	20.0
Average	78.6	14.2	7.2	58.4	15.8	25.8
Ninghsia	98.0	2.0	0	96.0	1.0	3.0
Chinghai						
Hwang-yau	67.3	22.7	10.0	-	-	-

241 Küei-teh	-	-	-	30.0	10.0	60.0
423 Hsi-ning	77.8	19.4	2.8	-	-	-
427 Wei-yüan	-	-	-	10.0	5.0	85.0
191 Average	72.6	20.5	6.4	20.0	7.5	72.5
162 Shensi						
Ting-pien	72.0	20.0	8.0	-	-	-
Yu-lin	66.0	26.0	8.0	-	-	-
Average for 20 locals	69.8	16.0	14.0	70.0	14.1	15.9
Average	69.4	20.6	10.0	70.0	14.1	15.9

241 423 427 195 [114] The following charts are the results of agricultural surveys taken during the war years by the Nationalist Government. They are on a percentage basis and bear out the validity of Buck's findings; namely, that tenantry in the Northwest is not a serious problem. It is dangerous to try and depict any trend from these statistics; although this period reflects a higher standard of living for the peasantry because of high wartime prices, it usually takes a long time to bring about any change in landed relations, since peasant attitudes are fixed and not susceptible to immediate change. (China Handbook 1937-1945, pp. 458-59, revised and enlarged with 1946 Supplement.)

241 427 195 162 Percentage of tenant farmers in China

Province	1937	1938	1939	1940	1941	1942	1943	1944
Ninghsia	18	21	16	10	15	14	15	13
Chinghai	19	18	18	21	24	28	18	21
Kansu	19	16	22	18	18	21	22	18
Shensi	18	22	25	22	23	25	21	24

241 423 195 162 Percentage of owner farmers in China

Province	1937	1938	1939	1940	1941	1942	1943	1944
Ninghsia	68	66	65	74	74	74	78	68
Chinghai	51	61	58	61	51	51	78	58
Kansu	61	66	59	62	61	60	55	63
Shensi	61	57	55	58	57	56	59	58

Percentage of part-owner farmers in China

Province	1937	1938	1939	1940	1941	1942	1943	1944
Ninghsia	14	13	19	16	11	12	7	19
Chinghai	30	21	24	18	25	21	27	21
Kansu	20	18	19	20	21	19	19	19
Shensi	21	21	20	20	20	19	20	18

427 [195] There are three systems for paying land rent; namely, cash rent, crop rent, and share rent. When a tenant rents his land by paying a fixed amount of money per mou to his landlord, it is cash rent. If he pays a fixed amount of cereals produced on the land, it is crop rent. If he divides the crops raised on his rented land with his landlord at a fixed ratio, it is share rent. No investigations were made during World War II regarding the systems of paying rent. The latest study was made in 1934 by the National

236 (T. H. Shen, p. 326.) The following is in 1,000 metric tons:
433

Province	Sheep Wool	Camel Hair	Cashmere
Kansu	3,611	180	30
Ninghsia	1,846	299	92
Chinghai	4,840	60	-
Sinkiang	12,853	22	10
Total	23,150	561	132

241 In Chinghai and elsewhere in the region fertilizer is scarce and the thick sod on the uncultivated hilltops is burnt in piles to help meet the fertilizer requirements of the fields below. The
311 following is a description of the principle livestock raising area
233 in Kansu and Chinghai. "The pasture land in Kansu and in the agricultural part of Chinghai is mostly the hill land far away from
[423] the cultivated fields and villages. It is not owned by farmers individually or collectively. It is public land. The right to graze these pastures is determined by the natural location of the villages in relation to these hills rather than by law. The nearest villages have more chance to use it. Sometimes one finds several villages grazing their sheep on the same hills without trouble. But if too many villages use the same pasture a definite agreement is made between the villages to limit certain villages to particular pastures. Such occasions rarely occur because the increase in sheep is naturally in accordance with the amount of pasture available. It is only in time of severe drought that the pastures are overstocked.

311 "The pasture of nomadic Chinghai (formerly a part of Tibet) is
423 also public land but different tribes and clans have the exclusive
233 right to use only such land as has been allotted to them by the government or by tradition. Within the boundaries of a certain tribe the pasture is open to all its member families, but no family owns any particular lot. There is no fencing or walls.

311 "The condition of these pastures is determined by annual rain-
233 fall. More rain and snow assure better grass. No human effort, such as seeding, manuring, irrigation or drainage is ever applied." (Buck, Land Utilization p. 176.)

4. Forestry

313 The following chart indicates the percentage of forest land for the region.

Province	Percentage of land in Forest
Kansu	6.0
Ninghsia	4.0
Shensi	16.0
Chinghai	2.0

If we leave out Shensi as a section of the Northwest, as George B. Cressy does, the Northwest is reported to have only one twentieth as much standing timber as the Northeast region (Heilungkiang, Kirin, Liaoning), or 197,429,814 cubic meters, which is located

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313 mostly in Kansu. In 1945, large-scale afforestation projects were
[185] undertaken by the provincial government, especially in Ninghsia. The exceptional fact about these projects was that the young seedlings were properly cared for and did not die as so frequently occurred in other afforestation schemes. The Ninghsia projects were, of course, taken over by the Chinese Communists.

311 In the loess plateau region, between the great wall and the
139 mountains, and between the Tibetan Highlands on the West and
313 the Yellow plain to the East, there is almost no forest cover. Forests are found only in the more inaccessible areas or in temple groves. Their disappearance is related partly to needs for lumber but also to the introduction of new crops, such as corn and Irish potatoes, which will grow on the upper slopes. Many hills
[241] were burned over in order to clear the land for a cultivation
[134] which could last for only a few years until erosion swept away the last trace of soil.

5. The border region

*175 In 1937, the Chinese Communists occupied the northern portion
*668 of Shensi as well as the fringe areas of Chinghai, Kansu, and
433 Ninghsia. This region was regarded as the Shensi, Kansu, Ninghsia, Chinghai border region and was developed by the Communists
[437] into a relatively self-sufficient area. When they were able, they exchanged surpluses such as oil, salt, herbs, skin and wool for articles which they could not as yet produce in sufficient quantity.

*175 The Communists carried out land reform as soon as they were
*668 fully entrenched in power. Large land holdings were cut up and
[423] parcelled out to peasants with little or no land. Rents and interest rates were reduced, efforts were made to extend cultivation, increase the number of draft animals, and develop labor cooperation beyond family circles.

*195 In a study by Yung-ying HsÜ, issued by the Institute of Pacific
*668 Relations, there is a summary of the economy and military status
433 of this region. There are numerous statistics to indicate increases in production of certain crops. These are the only available statistics we have for the region during this period, and the figures seem to indicate that despite the excessive expenditures for the maintenance of an army and guerilla forces as well as a governing body and administration, progress was made in raising the level of agriculture. However, by 1943, trade figures for the region indicate an imbalance of payments and a drain of currency from the region indicating that increasing military commitments were absorbing the created wealth of the region.

13 D. Conclusion

241 We may sum up the obstacles to agricultural development as
311 follows: geographic and climatic problems are the most serious. The amount of cultivable land that can be reclaimed and used for

13 farming purposes is not great. Deserts, high mountains, and
241 loess covered plateaux limit the expansion of further cultivation.
311 The margin of cultivation can be extended but not without the great cost involved in reclaiming land and constructing irrigation networks. The dearth of rainfall in many sections of the Northwest and the shortness of the growing season also handicap farming. The destruction of wooded areas and gradual ruination of the top soil in the past has resulted in severe erosion and the elimination of important organic substances necessary for soil fertility.

241 The absence of transport and communications has encouraged
433 greater subsistence farming and less production for markets.
489 The inability of the farmer to sell his surplus and obtain a profit-
(438) able return so that he could increase production or practice more diversified farming, has stunted the growth of internal markets in the Northwest region. The inability of the Nationalist Government to link the internal markets of the Northwest to China Proper by a series of transport and communication systems, and provide for a free flow of capital, as well as short term low interest rate loans, has seriously retarded the development of agriculture.

241 We have seen from our data that while the above problems are
311 quite serious, there exists no real problem of tenantry or popula-
(435) tion pressure on the land. Furthermore, given high prices for
(433) their goods, as occurred during the second world war, the farmers of the Northwest, in some instances, could by more intensive farming methods raise the level of output significantly.

241 Both T. H. Shen and J. L. Buck (agronomists) feel that if
311 there were some restoration of fertility to the land in terms of
433 resodding and planting root crops, and if a large portion of the hilly sections could be turned over to the raising of livestock, certain sections of the Northwest would come to have a distinct comparative advantage economically so far as the production of livestock is concerned, and greater incomes would be forthcoming to the rural inhabitants (this assumes such products could be cheaply exported and necessitates a proper balance between farming and livestock raising).

241 One of the most vital factors not yet mentioned, is the neces-
433 sity for constructing irrigation works and to further extend those already in existence. This entails also the building of large reservoirs; the small magnitude of irrigation works is one of the greatest stumbling blocks to the development of areas like Sinkiang and Kansu, since most of the land there is desert.

However, to carry out the above projects which would overcome some of the obstacles to the expansion of agricultural production, it would be necessary that large capital outlays be available. Serious consideration of greatly expanding the area under cultivation might, however, lead to higher costs than any administration could bear, and in turn result in diminishing returns.

241 433 Such costs could be avoided if intensive farming measures were emphasized, internal markets developed, and these in turn linked to China through a network of transport.

II. The Communist Period

241 *668 A. General Outline of Communist Policy for Agriculture in the Northwest

The pattern of Chinese Communist agricultural policy for this region is similar to what has emerged in China. The only differences have been in the timing and pace of reform policies which stem from the varying political, economic, and geographic conditions of the Northwest.

[423] When the People's Liberation Army had occupied the Northwest, land reform on a regional scale commenced. By 1951 land reform was completed in areas with an agricultural population of seven million; rents were reduced in areas with an agricultural population of ten million. (Current Background, No. 141, November 27, 1951. General Chang Chih-chung on Development in the Northwest. p. 14.) Immediately upon completion of the land reform, concerted efforts were launched to increase the agricultural and livestock production of the Northwest through cooperativization; by establishing mutual aid teams and then combining these into agricultural producer cooperatives where land, farm implements, and livestock are pooled. The ultimate objective of the Chinese Communists is to cooperativize all agriculture in the Northwest, and through a network of such cooperatives, concentrate on raising productivity by expanding cultivation, sowing with better types of seeds, and using more advanced tools and farming methods. Cooperativization is taking place in villages and oases, and steps have been taken to establish state-farms in regions where there are large tracts of reclaimed land.

241 311 185 *668 Survey teams were sent out to determine what land might be reclaimed and cultivated. Upon the estimates of these teams, units of the army went out to reclaim the land. Because most of the land surveyed was desert, the construction and extension of irrigation works, the building of reservoirs, the setting up of irrigation pumps to pump the water through newly-dug canals over the desert had to begin at almost the same time.

311 185 *668 288 439 [248] Some progress has been made in extending cultivation and planting cotton by reclaiming waste land. Communist planning is ambitious and in future five year plans, they intend to make the province of Shensi a textile processing area to which Sinkiang and other areas in the Northwest will ship their cotton. In this way, it is hoped to ultimately make the entire region self-sufficient in textile production. Textile factories are being erected in Sinkiang too for the purpose of processing cotton produced there, and it is already reported that some cotton cloth is being shipped to the U.S.S.R.

000 and it is already reported that some cotton cloth is being shipped to the U.S.S.R.

452 In the field of credit financing, purchasing and marketing, ex-
474 tensive efforts have been underway to place these activities under
*668 the control of cooperatives specifically erected and designed to extend State control over the rural areas. These co-ops are designed to assist in agricultural planning and to assure the realization of annual output quotas. Credit cooperatives are closely coordinated with the development of agricultural producer cooperatives in order to provide them with funds to develop and simultaneously to absorb any liquid savings that have accrued among these co-ops. For the purpose of State purchasing and marketing, cooperatives have been set up which survey individual households to determine household consumption and output. Frequently, advance purchases of expected agricultural surpluses are made by these co-ops. All surpluses which can be purchased by State marketing and supply co-ops are channeled through State apparatus to where they can be used most efficiently.

654 The State has taken measures to increase livestock production
232 by first attempting to set up mutual aid teams among the pastoral
*668 people and sending specially trained teams into the pastoral areas
[476] to immunize animals, teach the herders better care of their stock to prevent loss of animals, and conduct breeding experiments to
[179] improve the quality of livestock. Superior types of animals from the Soviet Union have been imported on some occasions to be bred with native stock.

242 Pests, locusts, and animal diseases have always been a
*668 scourge in this region. The State has undertaken to acquire tech-
[179] nicians and airplanes from the U.S.S.R. to spray regions where the threat of locusts has become serious. Insecticide has been distributed throughout the lower level agricultural co-ops and campaigns have been conducted among the peasants to eliminate plant and animal diseases.

313 Teams have been sent out to survey forested portions of the
*668 region and to determine what measures might be taken to expand existent forest reserves, plant saplings, establish nurseries and carry out large-scale afforestation to prevent erosion.

241 These have been the general measures taken by the Chinese
*668 Communists so far to develop agriculture in this portion of the
[433] country. Some successes have been scored; e.g., in increasing
[242] the number of livestock and higher crop yields per acre by the introduction of better procedures of livestock care and farming.
[474] However, the program of organizing the peasantry into co-ops to achieve similar results, has not been successful in every instance.
[918] Bandits and dissatisfied portions of the minorities who did not welcome the Communists have been quite active in disrupting their programs. As the years in the first five year plan pass, the plan-

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N
241 ning in agriculture has become more complex and difficulties are
668 encountered in realizing annual targets. The absence of trained technicians to introduce new farming techniques, the lack of accountants and organizers in the cooperatives, and the so-called
N ideological backwardness of many of the Communist cadres themselves have prevented rapid cooperativization. We will now exa-
121 mine very briefly the progress achieved in the different regions
241 of the Northwest and the problems which have arisen to prevent
668 agricultural development. In this way, the pattern of Chinese Communist agricultural planning can be observed more clearly. Henceforth, all statistics concerning the number of co-ops, agricultural output, etc., are Communist claims and, of course, must be carefully considered.

B. Application of Communist Agricultural Policy to the Northwest

S
175 1. Sinkiang

474 By June, 1955, nearly six years after the area was occupied
241 by the Communist Army, there were 75,215 mutual aid teams
668 (it is not known how many of these were on a permanent basis) and the agricultural producer cooperative numbered 1,702 with
[476] roughly 66.4 per cent of the peasant population participating in some form of co-op. By the end of 1956, in response to Mao's directive to hasten the creation of agricultural producer cooperatives, it is planned to increase their number to 5,100 and by 1957 to 10,240. (Far Eastern Economic Review. December 1, 1955, pp. 686-87.)

S
241 Emphasis has been on raising the production of wheat, oil
433 seed bearing plants, and cotton, by extending cultivation. The
668 Communists attribute all increases in production to a result of
175 further consolidation and development of the cooperative move-
[474] ment. Although there is a paucity of data on output, acreage, and output per acre, the following table has been pieced together from the information available, in an attempt to give some comparisons of increases attained during the Communist period with that of 1949. The figures for the Communist period have been obtained from 1954 and 1955 reports. See Table 1.

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242 The government has established agricultural stations, in
668 order to show the peasants of various nationalities how to improve
433 their farming methods. In 1955 it was reported that Sinkiang
175 had seventy such stations. Two tractor stations have also been opened in Urumchi and Sui-ting. These stations have sought to improve production by planting Ukrainian winter wheat and S-3173 cotton, and promote better procedures of farming such as summer ploughing, autumn ploughing, winter irrigation, sowing in rows, close-planting, and cotton-pruning. They have made efforts to wipe out insect pests. The Soviet Union sent

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668 training takes time before these technicians, accountants, etc.,
241 can go out and organize co-ops, operate them efficiently, and train other native cadres. The 1955 plan calls for the training of 600 technical cadres for the "Centers for Promoting Agricultural Techniques," for the training of 500 in-office cadres by rotation, and for the training of 4,190 accountants and 5,337 techniciens for agricultural producer cooperatives.

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668 An additional problem (which will be mentioned at this point
657 rather than repeated when each province of the Northwest is dis-
736 cussed) concerns the soldiers' dependents in the region and the
474 plight of discharged army personnel. The State has been particu-
729 larly upset by the lack of participation of these groups in coopera-
[464] tivization and special attention is now being devoted to utilize this source of manpower. Since dependents of servicement are given certain State stipends, in food, many of them feel that by joining a cooperative they will be deprived of this compensation. Because 1955 was a critical year in the Five Year Plan, the pace of erecting new co-ops and consolidating the older ones has been increased. Now many of the dependents and demobilized soldiers who were organized in these co-ops have backed out of them and many of these co-ops have, therefore, never been consolidated. Another problem in the co-ops is that the members do not want partly disabled or female workers, and, on the other hand, many dependents feel that the State should provide for them. (No. 1004, March 10, 1955, Supplements. "Actively Organizing Servicemen's Dependents for Mutual Aid and Co-op Work." U.S. Consulate General. Survey of China Mainland Press.) The proper allocation of labor in the Northwest remains a critical problem.

N
2. Chinghai

*175 By December, 1954, 575 agricultural producer co-ops had
*668 been formed, and this constituted 9.12 per cent of all households.
474 The number of mutual aid co-ops was not given but it was reported
452 that 69.7 per cent of all households had been cooperativized to
[476] some extent. There were also 159 supply and marketing coopera-tives, 148 credit cooperatives, and 12 handicraft producer co-ops. Long term low interest loans have been extended to poor peasants to encourage them to join farming co-ops. The first allocation totalled over 138 million yuan (U.S. $5,598). The interest rate is 0.4 per cent monthly and the repayment period is spread over five years. Besides these individual loans to poor peasants, there have been additional ones to enable the peasants to build small water conservancy works and buy new types of farm tools. All totalled, state loans amounted to more than 750 million yuan (U.S. $30,426) for 1955. (Far Eastern Economic Review, Dec. 1, 1955. pp. 686-87.)

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*668 In a provincial report by Chan Kuo-sheng, Secretary General
•241 of the Chinghai Provincial People's Government, on work
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conditions in 1954 and tasks for 1955, it was stated that 2,000 modern plows were now in use, and 67,245 mou (10,221 acres) of dry fields have been converted into water fields, while adequate water supply has also been made available to 28,597 mou (4,347 acres) of original water fields. It was planned to have 746 agricultural producer co-ops in operation in 1955, with an area of 5,115,000 mou (777,480 acres) to be sowed with a planned output for the province of 853,350,948 carries (42,337,207 bushels). An area of 500,000 mou (76,000 acres) is to be sown for oil bearing crops with a planned output of 10 million catties (24,137 metric tons). There is so little data for the pre-Communist and Communist period that it is impossible to construct a table. The only comparison that can be made is in oil seed bearing crops (and livestock which follows). The pre-Communist figures give an average of 21,000 metric tons for the years 1931-1939. Since it is planned to increase output to 24,137 metric tons, this will mean an increase of 3,137 metric tons; not a very significant increase.

In Chinghai there is a population of over one million; sixty per cent belong to the Tibetan, Mongolian, and Hui minority nationalities. The Communists reported that the province's seven million head of livestock in 1951 was increased to over twelve million in 1954 and it is planned that 20 million will be raised by 1957. (Pre-war and war year statistics list the total livestock at little over one million. Communists claims of sevenfold and twelvefold increases in this case, ought to be accepted with reservations. However, because the base year (one million) is so low, it is possible to have rapid increases of a relatively large maghitude.) The People's Government issued loans to husbandmen engaged in animal husbandry totalling 6,555,000,000 yuan (U.S. $266,365) in 1954. Steps were taken in cutting and storing grass for winter, repairing sheds and enclosures, and building winter and spring shelters to protect livestock during the cold season. It was also reported that in 1954, goals in planned purchases of cattle and sheep were achieved, and this produced definite contributions in support of the industrial construction of the State. At the same time, these activities served to educate the people in patriotism and mutual aid.

Tasks for the future were to continue to raise agricultural production based on the mutual aid and producer co-ops and to develop supply and marketing co-ops, credit co-ops, and arrange for markets in rural areas to promote interflow of supplies and planned purchase and planned supply of food. Care was to be taken to preserve livestock and to continue afforestation schemes. It was reported that within the province some 38,900 mou (5,913 acres) had been afforestated in 1954 and the number of fires greatly reduced.

*668 241 185 *175 Because Chinghai is a dry region and irrigation works are needed the Communists planned for 5,000 hectares (12,355 acres) of land to be brought under cultivation in 1955. Five teams of irrigation workers arrived at selected places to help extend the area of irrigated land. The plan for 1955 involved improving the irrigation canals, servicing 4,600 hectares (11,367 acres), and the setting up of two pumping stations. The Communists claimed that by the end of 1954, fifty per cent more land was irrigated than before the "liberation."

*668 185 Chinghai's problems are similar to those that prevail in Sinkiang. Production plans are not fulfilled, especially those plans for oil bearing crops and the improvement of sheep breeds. This is supposed to reflect a lack of responsibility on the part of the cadres toward the State's plans but the real problem undoubtedly lies with the difficulties of intricate planning and the insufficient number of trained, skilled cadres. Excessive spending and waste were attacked and these were blamed on the weakness of ideological leadership. The report by Chang Kuo-sheng goes so far as to say that workers are honest and loyal but it is the cadres who still retain "bourgeois" thoughts, and are to blame. Thus, it appears that the peasants are not being criticized for planning and organizational defects for fear of antagonizing and isolating many of them from Communist rural organizations.

*668 185 241 It seems fairly self-evident that as the work of planning in the agricultural areas becomes more complicated and detailed in nature, the number of technicians will have to be increased. In addition to being skillful accountants, agro-technicians, etc., they will have to be ideologically trained so as to faithfully carry out the State's plans. The Communists, then, have a twofold job: to train members of the various nationalities to be technicians and at the same time to turn them into good Communists. The speed at which they are attempting to turn out a large number may mean poorly trained technicians. This will complicate and hinder agricultural planning even more.

*668 578 Hsijaochiatso, the Vice-Governor of Chinghai, delivered a speech on July 22, 1955, to the National People's Congress on the progress made in Chinghai, which differed greatly in content from other speeches given by nationality leaders of the various frontier regions of China. While most of the other speeches to the National People's Congress dealt with concrete advancements made in the nationality areas, Vice-Governor Hsijaochiatso's report was devoted largely to acts of sabotage and resistance to socialization in Chinghai. A quotation will serve to point this out. "Because we are carrying out our construction plans very satisfactorily, the enemy both within and without the country has resorted to mad acts of sabotage in various forms. Very recently, in some pastoral areas, the rumor spread to the effect that the organization of cooperatives in pastoral areas is a disguised form

of the nationalization of cattle and sheep." And again, "there are also many counter-revolutionaries who exploit religion for sabotage and such instances are often found in the minorities areas. In certain pastoral areas in Chinghai, for instance, the discovery of heavenly edicts was rumored. These documents stated that the world would soon be destroyed, and the people meet with severe calamities and suffering." (Current Background. No. 356, September 12, 1955.)

Rumors and religious sects are apparently some of the more concrete forms peasant resistance has taken toward collectivization; among the various minority groups, such resistance can greatly hinder Communist agricultural planning.

No doubt there is much room for improvement in the pastoral sections of Chinghai, simply by the introduction of better types of breeding techniques and by showing the nationality groups the proper care of their herds during the winter season. In addition, more irrigation and better farming procedures ought to stimulate greater productivity. But the central problem will remain: whether cooperative organizations will yield benefits or whether they will reduce peasant incentive and thereby, in the long run, weaken agricultural development of the area.

3. Shensi

The following statistics are from a report by Hsieh Huai-teh, Director of the Department of Agriculture and Forestry for the Shensi Provincial People's Government on 1954 conditions and tasks for 1955. (No. 1014, March 24, 1955. Supplement. Survey of Chinese Mainland Press.) By the end of 1954, the total output of food for the province was 10,091,790,000 catties (201,835,800 bushels); cotton was around 1,800,000 piculs (119,970 tons) as compared to 65,802 for 1938 (nearly a twofold increase); but insufficient attention was paid to the planting of oil bearing crops in various sections and the total output amounted to only around 117 million catties (70,571 metric tons) as compared to the pre-Communist period average for the years 1931-1939, 212,000 metric tons.

By 1954, 59.4 per cent of the peasant households in the province were organized into some form of co-op, and 13.22 per cent of them had joined permanent mutual aid teams. There were 3,048 agricultural producer cooperatives including one collective farm. All together, around 847 villages have virtually become cooperativized. In Shensi there are a total of seventeen State irrigation canals which have enlarged the irrigation area by 44,112 mou (6,705 acres). The number of wells, water wheels and pipe wells have been increased, and the total area irrigated enlarged by more than 192,000 mou (29,184 acres), amounting to 86.7 per cent of the plan for 1954. The total irrigated area in the province is now over 5,623,290 mou (854,740 acres).

*668 231 The number of large domestic animals increased to over 2,586,000, that of sheep (including goats) to over 3,003,500 and that of pigs to over 1,825,000. There are four state livestock farms. Compared to pre-war figures, domestic animals and pigs increased twofold while sheep increased nearly twelvefold.

*668 313 *175 In addition, a campaign for afforestation and forest protection was launched so that in northern Shensi by the end of 1954, some 280,000 mou (42,566 acres) had been afforestated by the State. During 1954, 206,900 mou (31,449 acres) were afforested, nurseries occupied 4,900 mou (754 acres), 856,100 mou (130,127 acres) of wooded wilderness were surveyed, and new forest developments were carried out on 61,500 mou (9,348 acres).

*668 185 433 [241] [231] By 1955 it is planned to increase the grain acreage so that it will be 70,150,000 mou (10,662,800 acres) and the total output 1,970,000 piculs (13,002 tons). Oil bearing crops will be increased and plans to develop animal husbandry are underway so that there will be 2,790,000 large domestic animals, 2,008,000 pigs, and 3,515,000 goats and sheep to relieve the shortage of meat and dairy products in the markets. In 1955, the area to be [313] afforested will be 280,000 mou (42,424 acres) and 7,090 mou (1,064 acres) will be used for nurseries. Tea plantations will be strengthened and growing of vegetables in the suburbs of cities will be promoted. All this will be accomplished by increasing

*668 185 [474] [241] the pace of cooperativization for 1955; seventy-five per cent of all households will be cooperativized and agricultural producer co-ops will total 21,000. A spring campaign will be launched also to enlarge the sowing area and improve stock breeding, and efforts will be made to strengthen leadership over production in hilly regions; technical reforms will be continued and stepped up. Finally, satisfactory supplies of consumer and producer goods will be given to the peasant. The latter (producer goods) include farm implements, fertilizers, draft animals, insecticides, spraying equipment and good seeds.

Some of the defects that crop up in Shensi are particularly serious since it is one of the most advanced provinces in the Northwest, from the standpoint of the large number of co-ops. The following obstacles have arisen to obstruct the campaign to step up cooperativization. So-called rural "capitalist forces" and [578] rumors fabricated by counter-revolutionary elements have brought uneasiness to the middle peasants. Consequently, peasants have sold or slaughtered their farm animals, felled trees, rushed to buy consumer goods, squandered their money. This state of affairs is supposed to have resulted because the correct policy of solidifying poor and middle peasants has not been carried out. Commandism among the cadres is reported to prevail and this has had the over-all result of slowing down cooperativization.

000 So-called counter-revolutionary elements were reported to

policies. Such resistance is revealed in instances where wheat fields have been enlarged at the expense of cotton cultivation. Any failure to carry out the State's purchasing plans correctly then, will "undermine the prestige of the party and of state policies, encourage spontaneous capitalist tendencies among the peasants, and throw State plans into confusion." (Survey of China Mainland Press. No. 971. Supplement, January 19, 1955. "Make Accurate Estimates of Cotton Output and Fix Purchase Quotas.") Since the publication of this article on estimating cotton output and fixing purchase quotas, Peking has encouraged the "three fix policy" which is a measure designed to overcome food and agricultural raw material shortages in order to meet the planned targets set by the State. This policy provides for every administrative body throughout China to fix the production, fix the purchase of output, and fix the marketing of this output for the agricultural sectors of the Chinese economy. Undoubtedly this policy has been rigorously applied to the Northwest. Information is not available, however, as to whether the "three fix policy" has solved the above problems.

4. Kansu

The Communists have made strenuous efforts to restore Kansu to its former prosperity (in the days of the old Silk Road to Europe Kansu was a fertile and prosperous region). The plan to build Lanchow, the capital, into an industrial base safely removed from the seacoast, the opening of the Lanchow-Sinkiang Railway, and the extensive geological surveys for minerals and oil, indicate recent attempts to do this. On March 14, 1956, Deputy K'o Shih-king reported on the province's five year plan. Only information pertaining to agricultural progress and policy will be considered. The total output of grain and cotton in 1956 will be 10,350 million catties (207 million bushels) and 250,000 piculs (16,662 tons) respectively, representing 124.42 per cent (or 6,882,750 tons of grain) and 281.87 per cent of the quotas set for 1957 in the first five year plan. Afforestation will be carried out over an area of 5,300,000 mou (806,061 acres). (Union Research Service. Vol. 3, No. 3, April 10, 1956. p. 40.)

A comparison of Communist output figures with those of the pre-Communist period is difficult. Since we cannot consider wheat only as grain (grain in this case would include corn, barley, millet, etc.) We possess no figures for oil seed bearing crops for 1956. However, for cotton, where Communist resources have been invested to expand cotton production and output, the 1956 figure of 16,662 tons as compared with the 1941 high of 3,712 tons represents around a fourfold increase.

The Chinese Communists predict that the vast areas of wasteland in Kansu will be transformed into cotton fields soon. Experts have been experimenting, it is reported, to select the most

#668 185 248 311 suitable cotton strains for sowing and the best methods of irrigati for the large-scale cultivation of cotton in the province. 17,000 hectares (42,907 acres) are now being surveyed in the Kansu corridor and the vast plains along the Yellow River in Northwest China for future establishment of mechanized state farms. Altogether, the corridor and the plain are estimated to have over 650,000 hectares (1,616,150 acres) of wasteland. In 1954, it was found that the greater part of 200,000 hectares (494,200 acre of wasteland surveyed was suitable for cotton; three new mechan state farms have been set up so far there.

#668 241 369 Some of the information available on agricultural policy in Ka deals with the area around Lanchow, where there is some suburb farming, and the development of cooperatives in the Wu-chung Hu Nationality Autonomous Chou of Kansu Province (from a speech b Ma Teng-ai delivered on July 22, 1955, to the National People's Congress). Discussion of these areas will not give us a complete picture of the progress or difficulties in agricultural development but they will indicate the trend of agriculture in Kansu.

[565] [423] In Lanchow, it was reported that the landlord class and "feud exploitation of the peasants in the suburban areas had been aboli 15,112 mou (2,297 acres) of land had been confiscated and distributed among 20,400 peasants who possessed no land or very little Production and livelihood materials were also distributed among these peasants. So far, seven vegetable and agricultural producer co-ops and 606 mutual aid teams are in existence in the suburban areas. These included roughly 32.4% per cent of the peasant households; expanding agricultural production to meet the daily growing needs for vegetables in the city has been stressed. By fall of 1956 it is planned to have eighty-three per cent of all agricultural rural households in the suburbs, in agricultural producer co-ops. Two socialist vegetable producer co-ops will be established. Future emphasis will be on the expansion of vegetable farms, orchards, and development of poultry and pig rearing.

#668 241 369 The city of Lanchow has grown greatly in the past five years with the influx of troops, technicians, laborers, and their familie It is questionable whether agriculture in the surrounding areas can have maintained this population growth. This would imply that some food would need to have been shipped from China.

[474] [476] [443] There have been some difficulties in developing co-ops and mutua aid teams, as in other parts of the Northwest. Planned purchase and marketing of food, extremely critical in this neighborhood since the urban life of Lanchow rests upon these marketing procedures, have not been carried off successfuly and have slowed up cooperativization. There has been evidence of bureaucratiza tion, lack of class responsibility toward the poor and middle peasants, and a lack of serious study and investigation of conditio

*668 563 474 476 185 In the Wu-chung Autonomous Chou, in Kansu, Hui and Han groups live together. Today there are 277 agricultural producer co-ops, eighty nine for the Hui and 124 for the Han. More than 3,200 mutual aid teams have been developedp 1,200 are permanent. Future policy stresses increased agricultural production by cooperativization. In a speech delivered by Ma Teng-ai to the National People's Congress however, key emphasis was placed on the correct implementation of solidifying the poor and middle class peasants and following the principle of allowing the peasants of various nationalities to enter the co-ops voluntarily. Such a desire to enter must result from the mutual benefit they feel they would receive. When agricultural producer co-ops are to be formed, namely, consolidating the various permanent mutual aid teams and pooling land, farm implements, etc. special attention is to be given the customs, habits, and religious beliefs of the different nationalities. For instance, if the Hui and Han members of the same cooperative do not want to use the same well, different wells are to be drilled, and used separately. If hogs are raised in a cooperative, they may be attended by the Han members themselves and they are not considered an auxiliary occupation of the cooperative. The Chinese Communists, in dealing with the nationality problem in the Northwest, so far have tread very lightly whenever they wished to promote cooperativization. They have proceeded very slowly, using subtle methods of persuasion to urge the various nationalities to enlist their labor power in the mutual aid and produce co-ops.

*668 669 578 474 Communist administrators complain bitterly of counter-revolutionary activities in Kansu. In a speech by Su Chen-yung, Vice Director of Public Security Bureau, he states: "Counter-revolutionaries have unceasingly wages destructive activities against the Socialist transformation enterprises in both the cities and the countryside. With a view to impeding the work of the peasants joining the cooperatives, and to sabotaging agricultural production, they concentrated on certain reactionary landowners, wealthy peasants, and Taoist leaders to cheat some backward elements into establishing false cooperatives and even organizing uprisings." (Union Research Service. Vol. 3, p. 43.)

Su Chen-yung then gives as examples the disruption of progress in establishing agricultural cooperatives, the killing of Communist cadres, the burning of supply and marketing cooperatives storehouses, etc. Such admission by Communist officials of overt violence indicates that the Chinese Communists still are encountering peasant resistance, although nearly seven years have passed since their occupation of the region.

*668 • 241 474 185 C. Conclusion

The Chinese Communists have attempted to control closely

*668 and coordinate all rural activities toward the fulfillment of Chi-
● 241 nese Communist agrarian policy: complete cooperativization of
474 agriculture and the assurance of a steady flow of food and raw
185 materials through fixed purchase of produce. (The problem of
agricultural taxes in the Northwest has not been mentioned so far,
[651] The Communists have not reported any reduction of agricultural taxes, or what the average tax rates in the Northwest are.) They have a system of cooperatives at the basic production levels. Though cooperativization has taken place slowly because of the peculiar conditions of many areas in the last six years, it is expected that once some nucleus of control has been established in the rural areas in the form of permanent mutual aid cooperatives and producer cooperatives, rapid cooperativization will take place, to embrace, ultimately, all rural inhabitants.

*668 In the national minority area, the Chinese Communists have
563 proceeded slowly, so far, in their attempts to organize agricultural and pastoral activities. The problem of different national
[404] minority groups has been one of the principal stumbling blocks in the creation of lower level co-ops, and will undoubtedly pose a barrier to rapid cooperativization.

*668 Secondly, the State has been able to provide only a small
241 supply of farm implements and credit. Shortages in China and
654 the difficulties of transportation undoubtedly account for this.
452 It is questionable whether these shortages can be overcome in the next few years, but when they are, new farm tools and sufficient credit should account for significant output increases.

*668 Thirdly, one of the principal ways the Communists have
241 attempted to increase output in the Northwest has been through
433 extensive farming rather than through intensive means. They have done this by using vast amounts of labor, particularly military, to reclaim desert wastes, build irrigation works, and construct state farms to manage the reclaimed area. Evidence of this is most striking in Sinkiang and Kansu. Although Chinghai and Shensi with their hills and valleys limit extensive farming procedures, cultivation has been extended wherever possible. Because of the shortage of fertilizer and tools the Chinese Communists have been unable to promote intensive farming on a scale that would raise output per acre significantly. Instead, they have had to resort to expanding cultivation, that is, extensive farming, to obtain the desired increases.

*668 Finally, it is clearly evident that in all parts of the Northwest,
241 with the exception of Chinghai, there has been a general neglect
231 in promoting livestock production and instead an all-out effort to
433 increase the planting and extension of cultivation of wheat, cotton, and oil seed bearing crops. This program differs radically from policy measures suggested by Western agronomists, i.e., J.L. Buck and T.H. Shen who advocated the restoration of fertility to

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to the soil by planting grass, resodding, etc., and encouraging the production of livestock. The reason for Chinese Communist policy could be that wheat, cotton, and oil seed bearing crops (these are the only three types of crops ever mentioned in Chinese Communist statistics) have priority over everything else as these crops are urgently needed in other parts of China as well as to sustain population increase and industrial construction in the Northwest.

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It is difficult to forecast prospective agricultural development in the Northwest. The Communists have demonstrated that they are intensely interested in developing the region and they have provided capital, when available, and vast amounts of labor to reclaim land, construct irrigation systems, and build water reservoirs. However, one gets the impression from reviewing past achievements and future goals that the Communists are depending largely on organizational changes in agriculture to bring them the desired output increases. When new targets are established, they are to be realized not by state financial or technical assistance, but through greater exertion on the part of the peasantry, more closely organized planning, better utilization of resources, and through cooperative endeavor and labor emulation.

At this stage of development, the State has few resources that it can divert to the Northwest to aid in the development of agriculture. It is forced therefore to rely solely on the production relationships already existent there and reorganize these relationships when able, to make for increased productivity. We have already cited the difficulties the Communists have encountered in their attempts to reorganize agriculture. And it has been strongly suggested that as planning becomes more intricate, and as more technicians and planners are required, the problems will multiply. One link in the entire chain of planning has only to break and large sections of the economy would be disrupted. When output increases are as vital and necessary as they are now, and the demand for greater food supplies increases, the burden on agriculture will become heavier.

It is questionable whether any increases in food production, i.e., wheat, rice, maize, barley, millet, will be of an amount sufficient to be exported to China Proper. Instead, output increases will be required to feed the expanding population of the Northwest; the recent efforts to expand the production of cotton and oil seed bearing crops by bringing additional land under cultivation for the planting of these commercial crops, may, over a period of time, yield quantities sufficient to supply the textile processing mills the Communists are planning to construct. There is a possibility also that livestock increases and the by-products from livestock, i.e., wool, meat, etc., will be of sufficient supply to be exported to other parts of China. However, consider-

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able time will have to elapse before there can be the proper processing and handling of such by-products.

During the next five to eight years, at least, it is questionable whether the Northwest, from an agricultural standpoint, can contribute significantly to the industrialization program being enacted on the Chinese Mainland. The big problem will be whether the Northwest can contribute agricultural surpluses toward its own future economic development, and the answer depends on the success of cooperativization of agriculture and the maintenance of a constant outflow of food and agricultural raw materials. So far, we are only able to point out the trends in agricultural management and the stress on production of certain commercial crops and food staples. The problems the Communists have encountered and will continue to meet have also been mentioned. But it is still too early to venture an opinion as to the success of Chinese Communist policy in developing the broad base of agriculture in the Northwest.

2: Teichman G-5 (1919) 1921 AF13 Northwest China AF13

content at the present day to put up with the prehistoric means of communication which are still the only ones in existence throughout Shensi and Kansu. This absence of proper means of communication is an absolute hindrance to any real progress, and the speedy construction of more railways in China would seem to be of more importance than all the other contemplated reforms thrown together. Road building seems to be past praying for in these days of railways, but it is not at all certain that a portion of the enormous sums spent in railway construction would not be more profitably expended in the construction of a few trunk roads; the latter could at any rate be built by the Chinese themselves without incurring loans.

From Weinan to Lint'ung is a distance of 80 li, the latter being another important wheat and cotton-growing centre. It is not necessary to make these district cities the stages, as villages with inns are numerous all the way from T'ungkuan, and travellers can regulate the length of their marches according to their choice. The following is a list of the usual stopping places, which lie at intervals of 20 to 30 li one from another; T'ungkuan, Huayin Miao, Fushui Chen, Liutzu, Hua Chou, Ch'ihshui Chen, Weinan, Linkou, Lint'ung.

Lint'ung lies close under an outlying spur of the Ch'inling Shan, whence issues a hot medicinal spring. Over these springs is built an elaborate rest-house to accommodate the guests who come to take the baths, and it is thus a popular resort for the rank and fashion of Hsian. The establishment, or rather previous constructions, date from the time when Hsian was the capital of China, Lint'ung having been a pleasure resort for the Emperors of those days. The Emperor who designed the Great Wall and destroyed the scholars and their books (about B.C. 200), and whose name is therefore supposed to be execrated by literary men, is buried in the neighbourhood. We revelled in the baths, after having been smothered in dust for ten days.

On the following day a long half stage of 50 li brings one to Hsian Fu, now officially known by its old name of Ch'angan Hsien, the capital of the province. It is an immense city, of the Tartar type, comparable only to Peking before the introduction of modern improvements. In size

2: Teichman G-5 (1919) 1921 AF13 Northwest China AF13

CHAPTER III

FROM HSINGAN UP THE HAN VALLEY TO HANCHUNG

Hsingan and the resources of the Han valley—Hanyin—Shihch'uan—Hsihsiang—Kulupa—Catholics and Protestants—Hanchung—Northern troops in the Han valley.

HSINGAN FU is now a first class district city known as Ank'ang Hsien. It lies on the southern bank of the Han River at the head of a small but very fertile plain, where the river emerging from gorges flows for a few miles through more open country before disappearing into the mountains again. It consists of two cities, called the old and the new. The old city which is the commercial centre and contains most of the shops and general population is built right on the river from which it is protected by an embankment. A mile to the south lies the new city, a much smaller enclosure, containing residences of gentry and retired officials, Government schools, etc. The new city lies on higher ground and is said to have been built as a refuge in time of flood. The alluvial plain between the two cities is enclosed by stoutly built dykes running from the river up to the rising ground to the south. We were well housed in a Government building in the new city which forms a pleasant residential quarter as compared with the crowded streets of the old.

Hsingan is an important commercial centre and serves as a gateway into the whole basin of the upper Han, the Yangtzu's longest tributary. This upper Han basin may be likened to a miniature edition of the province of Szechuan, an extremely rich mountain region intersected by innumerable little fertile valleys and plains, with Hanchung, the administrative capital, comparable to Chengtu, Hsingan, the commercial gateway, to Chungking, and the Han with its gorges and rapids to the Yangtzu. To complete the likeness many parts of the Han basin are just as red as the famous "red basin" of Szechuan. A great variety of products are collected at Hsingan from this rich region and shipped down river to Laoho K'ou and Hankow, such as cereals, vegetable oils, fruits, nuts, varnish, wood oil, silk, tea,

2: Teichman G-5 (1919) 1921 AF13 Northwest China AF13

438 vegetable wax, cotton, hemp, hides, bristles, edible wood fungus, tobacco, indigo, paper, cane sugar, straw braid, etc., 241 of which the most important is the wood oil[1], crushed out of the seeds of an apple-like fruit ripe in the autumn. Coal, 135 iron, copper, gold, silver, antimony, and asbestos, and perhaps other minerals, exist in the neighbourhood. As a result the basin of the upper Han is one of the most prosperous regions in the whole of China and the population one of the wealthiest. Rice is usually cheaper even than in Szechuan. But in spite of its prosperity the region is isolated and backward as regards foreign improvements, and will probably undergo a very rapid development when tapped by a railway. It is one of the anomalies of modern China that this rich well-populated region and also the productive wheat and cotton-growing prairies of the Wei River valley should still be without railway communication, though neither are really difficult to get at.

186 The population of Hsingan is somewhat rough, not over 563 friendly to foreigners, and strongly tainted with secret society influence, and compares unfavourably with that of Hanchung and the towns further up the valley, which have been populated by the more kindly Szechuanese. There is a considerable Mahomedan community of immigrants from Kansu, who as elsewhere keep very much to themselves.

487 The Han River is of course the main artery of communication. To Hankow downstream takes one to three 133 weeks according to the state of the water, and the return journey upstream one to two months. Steam navigation on the upper Han seems to be out of the question owing to the shallows, shifting channels, and rapids. The worst rapids, some of which are very dangerous, lie between Yang Hsien (at the lower end of the Hanchung plain) and Hsingan.

136 There is good pheasant, partridge, and wild-fowl shooting to be had round Hsingan, and immediately to the south lies a very wild and sparsely-inhabited mountain region on the borders of Shensi, Hupei, and Szechuan, which is said to harbour all kinds of big game, such as deer, goat, pig, bear, leopard, and even the tiger.

[1] Wood oil is nowadays one of the most important articles of the China export trade; the trees flourish on bare stony mountain sides incapable of other cultivation, and are worth studying from the point of view of afforestation generally.

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countries. Yet a series of macadamized trunk roads would be an inestimable boon politically and economically to the country and the people and could be constructed at a comparatively small cost; some of the large sums spent annually for the upkeep of unnecessary military forces in the various provinces might with great advantage be diverted to this end.

Leaving Hsingan the Han River is crossed by a ferry above the city and the trail then runs westwards up the valley plain of the Yo River, which is navigable for small boats from Hanyin down. Its valley forms a rich little alluvial plain growing rice and wheat and supporting many farms and villages, and offering an admirable route for a railway westwards, which can thus avoid the gorges of the Han in this neighbourhood. To the south a range of mountains rises steeply to a height of a few thousand feet, separating this little plain from the Han River, while to the north the valley slopes up to low hills of red clay backed by mountains. Seventy li from Hsingan the township of Hengk'ou is reached, the end of the first stage, situated at the junction of the Yo River with the Heng River from the north. It has the honour of being the native place of the present Military Governor of the Province, General Ch'en Shu-fan, the old rule, which has many advantages, that an official is debarred from serving in his native province, no longer holding good.

From Hengk'ou to Hanyin is called 110 li, but the road is good and the li very short (at least four to the mile), so that with ponies and pack mules the distance can easily be done in a day. The Chinese li is commonly considered to be the equivalent of a third of a mile, which, however, is only the case in out of the way parts of Kansu. Elsewhere north of the Ch'inling Shan ten li to three miles may be taken as a fairly accurate average. In the upper Han valley, as in Szechuan, the li averages about four to a mile, or even more in the mountains; the difference north and south of the Ch'inling Shan being probably due to the use of animal and coolie transport in those regions respectively.

Ten li beyond Hengk'ou the hills close in on the river to form a *kuan*, or barrier, and the path crosses a low spur to descend again into the valley, here less than a mile in width, up which it continues past several large villages, crossing and recrossing the stream by fords, for the rest of the way to Hanyin.

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than some of the veterans of the China Inland Mission, who have passed the best part of their lives in isolated stations in Shensi and Kansu, such as Hsingan, Hanchung, Fenghsiang, Lanchou, Liangchou, Hsining, and Ninghsia, where months and years pass by without their ever seeing another foreigner. Their success in securing converts may not have been striking, but it is permissible to speculate on whether those whom they have secured are not more genuine Christians than the native Catholics. Often in spite of the basest ingratitude on the part of the Chinese, whose wounds and illnesses they tend one day, only to be passed by in the street with a scowl on the next, these noble men have laboured on year after year doing good and leavening, in however small a degree, the leaden mass of Chinese materialism. The results of their work may not always be apparent now, but they have sown a seed which cannot fail in time to produce a harvest of some kind, a harvest of which other Missions not infrequently reap the benefit.

We spent the night at Kulupa, where we were most hospitably received and entertained with a banquet.

The distance to Hanchung is called 75 li. After descending for about an hour's march through gullies in the hills the track debouches on to the famous plain of Hanchung, a highly fertile, heavily cultivated, and densely populated region, stretching for a certain distance along both banks of the Han, and entirely surrounded by mountains. Another two hours' march across this plain, past the boundary between Ch'engku and Hanchung (Nanch'eng) districts, brings one to the Han River here a shallow stream flowing in a broad sandy bed, a hundred yards wide and a few feet deep. The path runs along the banks of the Han for a short distance, and then, crossing by a ferry, continues for ten li over the plain to reach the busy township of Shihpali P'u. This village, which, as its name implies, is 18 li from Hanchung, is developing into a large town, and is evidently the centre of the through trade from Szechuan, Kansu, and Northern Shensi, which, as is usually the case in China, is driven to avoid the capital by the various tolls and dues. From here the road runs west for the rest of the way to Hanchung, passing through a rich suburb to reach the East Gate of the city.

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361 Fop'ing, formerly a T'ing and now a third class Hsien, is a tiny place, a mere walled hamlet, containing only twenty or thirty families, and is probably about the smallest and most miserable of all the Hsien cities in China Proper. It lies in a cultivated valley, on the headwaters of a stream which apparently flows west and then south to join the Han near Ch'engku. This valley, over 6000 feet above sea level, is a quarter to half a mile wide, and surrounded on all sides by [241] lofty mountains; it produces wheat, barley, maize, beans, peas, and potatoes, the latter being a most important crop [262] in these mountains and in many parts the staple food of the people. The wheat was just showing above ground in the middle of May when it is ripe for harvest in the Hanchung plain. This valley appears to be the best and most populous part of the district which is entirely covered by high ranges, including T'aipai Shan in the N.W. corner. The post of magistrate is naturally not sought after. The Chinese consider Fop'ing a "dreadfully bitter" place (*k'u ti hen*), since there is no rice nor pork, nor other desirable food supplies; but to the foreigner the abundance of game, bracing healthy climate, and magnificent mountain scenery combine to make it a delightful spot. When the railway reaches Hanchung a month in Fop'ing in the autumn with dog and gun will form a pleasant way of spending a holiday.

136 We stayed a couple of days at Fop'ing, during which it rained in the valley and snowed on T'aipai and the higher ranges. The cultivated fields round the city and the brush-covered hills to the south abound in pheasants, and I shot a good many cocks, which in spite of the season were excellent eating and a welcome addition to our food supplies. I have shot a great many cock pheasants in the highlands of Shensi and Kansu in the summer for food, as the parts where supplies are scarce and pheasants abundant always seem to coincide. The game-exporting companies have not yet extended their activities to these parts, which provide probably the best wild pheasant shooting in the world. The pheasants usually met with are the usual Mongolian ring-necked species, with the white ring growing less and less as one goes west till it dies out altogether in the mountains of the Kokonor border. These birds literally swarm in the corn fields in many of the cultivated valleys in the mountains

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plain. The excuses were unnecessary, as we had throughout raised objections to the size of the party. Carts, which we had not seen since leaving T'ungkuan, were sent to meet us here in case anyone should want them, and the prospect of a return to Hsian reclining in a cart, after scrambling up and down the mountains on foot for so many days, was as attractive to them as a passage in a train *de luxe* would be to a travel-worn European. To me a journey in a Chinese cart is a hideously uncomfortable method of travel, unless it be across absolutely smooth Mongolian grass lands. A Chinese cart travels along a Chinese paved road with a series of bumps sounding like gunshots, which rapidly reduce a European to pulp, but apparently have no effect on a Chinese.

From Hsink'outzu to Chouchih Hsien, a distance of 30 li, the track descends across an undulating plain, which in spring is one vast wheat-field dotted with hamlets and the walled farms peculiar to the Shensi plains. Chouchih, a first class Hsién city and the centre of one of the rich agricultural districts of the Wei valley, lies a few li to the south of the Wei River. It is a regular northern city compared to the crowded little towns of the Han valley, and consists of little more than one long dusty street, open and empty looking. Wheat and cotton are the staples; a little coarse silk is produced, the cocoon season being in full swing at the time of our visit during the latter half of May. The two characters for Chouchih are rather unusual ones, and mean "the winding of mountain streams," which appears to refer to the Hei Ho and its tributaries which flow down from Fop'ing and T'aipai Shan through deep winding gorges to the plains. The district, like all those of Central Shensi, is a very ancient one, dating back to the beginnings of Chinese history. We were as usual quartered in the magistrate's yamen, which happened to be in an unusually good state of repair and provided most comfortable accommodation. A study of the archives of these district yamens of Central Shensi would doubtless prove of great interest to the historian, since, where they have not been destroyed during the revolution or the White Wolf rebellion, they date back to very ancient days.

From Chouchih we turned westwards and travelled across the plain to Mei Hsien, a distance of 100 li. The

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road, here a good cart track, runs across an undulating wheat prairie, dotted with hamlets and walled farms, with the Wei River out of sight on the right hand, and the great barrier of the Ch'inling mountains on the left. Three townships are passed, Yapei, Hengch'u, and Huaiya, the second being of some interest as the home of a famous Sung Dynasty philosopher. The amount of wheat grown on these plains of Central Shensi is very great, especially nowadays since the suppression of opium cultivation. There is no better wheat flour in China than that of Shensi, and it forms the staple food of the population, eaten in the form of bread (*mo*) and macaroni (*kua mien*). With this excellent wheat flour, good mutton, and plenty of game in the mountains, the foreign traveller is well off as regards food. A sound rule for travel in the interior of China is to avoid all tinned foods and rely on native supplies cooked in foreign style; the former only increase one's baggage loads and are quite unnecessary; native food made up in the native style is unappetising to most foreigners as well as being dangerously dirty.

Mei Hsien, a second class district city, is a small place, but like Chouchih is the centre of a rich agricultural region comprising the plain between the Ch'inling Shan and the River Wei. The latter flows a few li to the north of the town. The city has suffered greatly from rebellions and brigandage during recent years.

From Mei Hsien to Fenghsiang Fu is called 110 li, but the road being good and mostly level, the distance can be covered in one long march. The Wei River, in the dry season a thick yellow stream a hundred yards wide and few feet deep, is crossed by a ferry and the road then runs westwards with the river on the left hand and a loess bluff on the right for 35 li to the village of Ts'aichia P'o. At the time of our visit this low-lying land was almost entirely devoted to indigo and dotted with the peculiar-looking brick pits in which the plants are mashed in preparing the dye. This is an old industry revived on account of the scarcity of aniline dyes. The indigo forms a useful rotation crop for the relief of the land exhausted by the everlasting wheat. We saw little else but wheat, cotton, and indigo during our tour of the loess of Central Shensi, growing on

T.T. the uplands, river plains, and irrigated lands respectively.

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mountains to drain off the great floods which at that time submerged the whole of North West China, thus bringing into existence the modern Yellow River and the fertile deposits of *Huang T'u* (the "yellow earth," which we call loess); perhaps an earthquake gave rise to this tradition.

From this last pass the track drops steeply into a gorge which is followed for an hour's march to the S.E., and then, crossing the spur which encloses the gorge on the south, drops down into the loess plains on the right bank of the Yellow River. From this point to Hanch'eng Hsien, a distance of 40 li, the trail runs across an undulating plain, which is not really a plain but the usual loess plateau, here of moderate thickness, sloping down from the mountains to the Yellow River, the latter flowing five to ten li away on one's left. This plain between the foot hills and the river is one of the most fertile and densely populated regions in the province, and is thickly dotted with farms, villages, temples, tombs, and pagodas. It is always so in North China, densely peopled fertile plains and barren empty mountains side by side. The largest of the many villages passed is Hsichuang, where there is a likin station to catch the trade coming down from the North by the route we had traversed; but its receipts must be small nowadays, for not only not on this road, but at no time during our tour of Northern Shensi, did we meet a single load of merchandize or a single traveller of the better class, so utterly has all trade and traffic in that region been destroyed by the brigands. Finally there is a short steep descent to reach the city of Hanch'eng, which lies surrounded by fields of indigo in a basin in the loess plateau formed by the valley of a stream flowing S.E.

Hanch'eng, a second class district city, is a large and wealthy town, at least it appeared to us to be so, coming from the poverty-stricken North. The district is one of the most fertile in the province, and is noted for its wheat, cotton, hemp, and indigo. The irrigated fields round the city produce three crops in one summer, maize being sown after a crop of wheat has been harvested, and indigo being then transplanted in early June into the same field, the indigo and the maize growing up together.

The most direct road from Hanch'eng to Hsian lies

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CHAPTER VIII

FROM HSIAN FU IN SHENSI TO LANCHOU FU IN KANSU BY THE GREAT WEST ROAD

The Great West Road—Hsienyang—Lich'uan—Ch'ienchou—Yungshou—Pinchou—Ch'angwu—Kansu border—Chingchou—P'ingliang—Kansu Mahomedans—Wat'ing—The late General T'ung Fu-hsiang—The Liupan Shan—Lun[illegible]—Chingning—Rest-houses and inns—Brackish water—Trail of desolation left by Mahomedan campaigns—Huining—Disadvantages of being a magistrate on the high road—Beacon towers—Anting—Kan'tsao Tien—Lanchou—Kansu climate—Wool factory—The Governor of Kansu—The C.P.O.—Missionaries—Recent events in Kansu.

FROM Hsian Fu in Shensi to Lanchou Fu in Kansu by the Great West Road is a distance of about 1400 li (say 425 miles), which is covered in eighteen to twenty days. If the road from Hsian to Chengtu and Lassa be considered the most important overland route in China, this one, from Hsian to Lanchou and Kashgar, has every claim to rank next. Unlike the former, which is only a mule trail, it is a cart track all the way. Passing from the coast into the heart of North-Western China through a natural gap in the mountains formed by the valley of the Wei River, it continues into Central Asia along the narrow strip of fertile country occupied by the Chinese between the mountains of Northern Tibet and the deserts of Mongolia. It is both one of the longest and most ancient highways in the world.

The first stage, a short one of 50 li across the plain to Hsienyang Hsien, crossing the Wei River by a cart ferry just before getting in, is the same as the first march on the Chengtu road. Outside Hsienyang the Szechuan and Kansu roads bifurcate, the latter leading north-west across the undulating loess plain for 70 li to Lich'uan Hsien, whence it continues for another short march of 40 li across similar country, ascending gradually, to Ch'ien Chou. During the month of May these plains are covered as far as the eye can reach with healthy-looking crops of wheat and lucerne; the latter, a most useful crop in Western Shensi and Eastern Kansu, is used for fodder; in the Han valley, however, a

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241 sort of veitch or lucerne is grown in the dry rice fields in the winter and ploughed into the ground at the time of the spring flooding as manure for the rice crop.

487 Ch'ien Chou lies near the north-western edge of the Wei valley plains, and the road now ascends steadily over
133 loess hills for 90 li to Yungshou Hsien, lying just under the summit of a loess clad range which here bars the way to the west. The corn fields in the neighbourhood were full of pheasants, though there was little or no cover apart from the standing crops. The times being at the moment fairly peaceful, we met a constant stream of the large carts which ply on this road, one animal in the shafts and three in front, mostly laden with the famous Lanchou water pipe tobacco, which is exported from Kansu to all parts of China. Leaving Yungshou, half an hour's walk uphill brings one to the top of the ridge (4500 feet), whence there is a steep descent into a stony valley leading down to a hamlet half-way to Pin Chou. Here the road ascends again through the loess to a plateau intersected by ravines, down one of which it descends
[361] steeply to reach the valley of the Ching Ho and the district city of Pin Chou, 70 li from Yungshou.

The Ching River is here a shallow mountain stream and quite different to the torrent of liquid mud met with lower down; apparently it assumes the latter character after its confluence with the Huan Ho, which flows down from the loess of N.E. Kansu. The road runs up the cultivated valley of the Ching Ho, here about a mile wide and bounded by cliffs of loess and sandstone dotted with caves. Twenty li out
[346] the temple of Tafo Ssu is passed on the left hand, where a number of cave temples have been cut out of the rock in one of which there is a huge figure of Buddha. Two hours' march further on the road leaves the valley and climbs up on to the loess plateau, across which it runs for the rest of the way to Ch'angwu Hsien, a little city floating in a sea of wheat, 80 li from Pin Chou.

From Ch'angwu Hsien to Ching Chou is a long day's march called 100 li, the Kansu border being crossed at a village 30 li out. The road runs across the plateau, winding to and fro to avoid the cracks and fissures in the loess, the beginnings of ravines, cañons and valleys. It is lined with trees much of the way, and often these are seen to lead to

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It is suggested that the Chinese might with advantage borrow the services of some officers from the Survey of India and proceed to the triangulation of the whole country. The results, at any rate in Kansu and parts of Shensi, would be surprising. Amongst many other interesting facts which would be brought to light are the actual heights of the snow-clad mountains on the western borders of Kansu and Szechuan, some of which probably equal or surpass all but the highest giants of the Himalayas.

Min Chou (now Min Hsien) is a small city with busy suburbs situated on the right bank of the T'ao River at the point where the latter, flowing down from the Kokonor mountains in the west, makes a sharp right-angle turn to the north. The altitude is about 7500 feet. The T'ao River valley, here nearly a mile wide in places, is very fertile, and produces wheat, barley, beans, hemp, etc. Like T'ao Chou and Hsiku, Min Chou is a centre for the Chinese trade with the Tibetan inhabitants of the Kokonor country further west. A rough cart built entirely of wood with remarkably high wheels and drawn by the half-bred yak is used round Min Chou, on the roads to T'ao Chou, on the grasslands round the latter, and in other border parts of the province. I mention this cart because it is obviously very useful and because it is quite unusual to find wheeled traffic of any kind in such mountainous country in China; its introduction into the Tibetan inhabited plateau west of Tachienlu in Szechuan would revolutionise transport in that region.

Leaving Min Chou the road runs along the right bank of the T'ao River for ten li, and then crosses to the left bank by a ferry, the bridge having been destroyed at the time of the White Wolf raid. The river is here in the summer about 80 yards wide, six to eight feet deep, and very rapid. Navigation is confined to rafts of lumber down stream. From the ferry the path continues up the valley for three to four hours' march to the village of Hsitachai. The T'ao River valley is in this neighbourhood one of the most attractive regions in Kansu, or perhaps in China, being fertile and well cultivated, and bounded on the southern side by forest-clad mountains, the foothills of the great Min Shan. The river flows much of the way in a narrow

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133 563 is the same land of nomads and lamas, whether Tibetan or Mongol. In past centuries the Chinese were ever engaged, with varying success, in defending their fertile plains and valleys against the incursions of Tartar hordes from these tablelands; now the nomads are impotent outside their own territories, reduced in numbers and virility perhaps by the lama religion, and these vast empty spaces serve as buffers protecting China from the rest of Asia. Undoubtedly her wisest policy is to leave the scattered inhabitants to manage their own affairs as hitherto under her vague suzerainty.

133 489 The trail runs north-west across these grass-lands, passing continually from one shallow valley to another; at first these valleys slope S.E. towards the T'ao River, but after 20 li or so they slope N.W. towards the Ho Chou [361] River. The pasturage is excellent and there are many nomad encampments; the latter are only to be approached with care, as they are guarded by huge Tibetan mastiffs, I should think easily the most formidable breed of dog in the world, and the nomads themselves are not friendly to strangers. Indeed the Amdo Tibetan of the Kokonor grass country is about the last kind of individual one would choose to meet alone on a dark night, and a wilder or more picturesque looking lot of ruffians it would be difficult to imagine. They always go heavily armed, and are robbers by nature. Once properly introduced to them, however, one can count on friendly treatment, and we had nothing to complain of in this respect. After six or seven hour's march from the 792 village where we had passed the night the trail descended from the plateau into an open and partly cultivated valley with the temples and barrack-like buildings of the monastery of Heitso Ssu at the end of it, a most striking sight in this land of tent-living nomads.

Heitso Ssu (the Chinese name) is a large and wealthy monastery, containing, we were told, some thousand lamas. It is quite a little town in itself, with, as is usually the case on this border, a small Chinese village or bazaar of one street, run mostly by Mahomedans, attached to it. It lies at the junction of two small valleys below the level of the [241] grass country, and the neighbouring slopes are well cultivated with barley and peas and dotted with Tibetan farms. We 609 were badly housed in a kind of inn in the Chinese bazaar,

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and the black rectangular tents of nomad Tibetans, the usual hinterland of *Ts'ao Ti* (Grass Lands), which everywhere in the north and west lie behind the border ranges of China. Apart from the nomads and their ponies, yak, and cattle, the only sign of life were the huge vultures, which were extraordinarily abundant. The final ascent to the pass is by easy gradients, and a similar descent of about 10 li brings one to Êpo, a dot of a place lying in a sea of grass.

Êpo (this is the regular romanisation of the Chinese characters, pronounced Obaw) is a small walled village and former fort situated in a shallow valley sloping from east to west, surrounded by grassy downs and backed by rocky snow capped mountains. The elevation is probably between 11,000 and 12,000 feet, and there is no cultivation, the necessary grain being brought up from below. The entire community, composed of a few Mahomedan Chinese, seemed to be engaged in the collection of wool, with occasional purchases of musk and deer horns. The latter (wapiti antlers) when old are quite cheap and are collected and sent down to China for the manufacture of glue; when n velvet they are extremely valuable and are ground up to form the well-known Chinese medicine for revivifying the old. This medicine is said to be very powerful, and I was informed by a member of our party, who here purchased a pair for a friend, that care must be exercised in taking a dose to see that the powder comes equally from both antlers, otherwise there is a grave danger that the patient may be revivified on one side only! Musk may also be profitably purchased at Êpo, and for some days afterwards our caravan was redolent with it. Wherever one may pack a pod of musk it is guaranteed to make its presence widely known. The advantage of buying musk at a place like Êpo, apart from its cheapness, is that one is pretty certain to get the genuine article, adulteration being widely practised in the trade in China.

Êpo appears to lie actually on the Kansu-Kokonor border (though boundaries are vague in those parts), and its position is of some strategic importance as commanding one of the few routes from Kansu and Mongolia up to the Kokonor, north of Hsining. We were met here by some Mahomedan braves sent up from the Hsining and Tatung

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canny Mahomedan innkeeper, seeing such a large party of officials and soldiers (everywhere unwelcome guests owing to their custom of helping themselves to what they want and not always paying for it), assured us it was only 30 or 40 li to Tatung Hsien by a good road; so we took the road again after a rest, and had another weary six hours' march before getting in. The road lies down a narrow picturesque valley, in which trees, farms, and cultivation make their appearance again, and finally debouches on to a broad and fertile valley, closely cultivated and thickly populated, which is crossed to reach Tatung Hsien. I have but the vaguest idea of the latter part of this long march, which was finished by the light of lanterns in the dark, beyond remembering that we forded a stream running in various branches just before getting in, and narrowly missed taking an evening bath on more than one occasion.

Tatung Hsien is a prosperous city, the centre of a fertile corn-growing valley populated largely by Mahomedans. The elevation is about 8000 feet and the wheat was ripening for harvest during the middle of August. It reminded us somewhat of Ho Chou. Being comfortably quartered here in an old military yamen, we enjoyed a welcome day's rest. Tatung Hsien is also known locally by its old name of Maopeisheng, and usually appears on foreign maps under that name in various guises. If a traveller in China, unacquainted with Chinese characters and their usual romanisation, writes down the names of places as they sound to his ear, the results are often unrecognizable; further confusion is entailed by the varying forms of romanisation in use in different European languages. There are several townships called Tatung in Western Kansu; they are sometimes distinguished by being referred to as Tatung Hsien, Nan Tatung, Pei Tatung, and Hsi Tatung, but confusion often results.

From Tatung to Hsining is a distance of 110 li by a good cart track down a fertile and well-cultivated valley, past numerous farms and villages. The march may be divided into two by halting at the walled township of Hsin Ch'eng, 40 li out, where the valley narrows to a defile and is barred by an old wall with a gate and the inevitable likin barrier. This is considered by some to be a branch of the Great

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712 Wall; if this is so, the old gate and wall at T'ungmen Kuan, between Labrang and Ho Chou, is probably a portion of the same loop, which must have been constructed to protect the Hsining region against the incursions of Tibetans or Mongols from the Kokonor, and the course and history of 133 which it would be interesting to trace. The road eventually debouches on to the city of Hsining, lying in a small cultivated 489 plain of loess formed by the junction of three valleys, the Pei Ch'uan from Tatung Hsien, the Hsi Ch'uan from Tanko T'ing, and the Nan Ch'uan from T'a-erh Ssu (Kumbum), the combined streams going to make up the Hsining River.

361 Hsining is one of the chief cities of Kansu, being the 241 centre of a region of fertile corn-growing valleys, producing wheat, barley, and particularly beans. Its commercial 439 importance arises from its position near the Kokonor 648 border, and together with Tanko T'ing, a day's journey further west, it commands the bulk of the valuable Kokonor trade in skins, furs, deer horns, musk, gold, and particularly wool. A state of passive hostility has reigned between China and Tibet since the collapse of Chinese power in Lassa consequent on the revolution, and the Szechuan-Tibetan trade through Tachienlu has suffered greatly thereby; the Hsining and Tanko trade, on the other hand, has continued uninterruptedly throughout these troubles, and has perhaps even increased. As elsewhere on this border this trade is largely in the hands of the Mahomedans. 487 Before the Mahomedan rebellion of 1860–70 the Hsining-Kokonor road to Lassa was the most frequented route between China and Tibet, but was then replaced by the Szechuan road through Tachienlu; now it is coming into 361 its own again. The interior of the city is fairly prosperous in appearance as far as Kansu towns go, but by no means indicative of the commercial and political importance of the place. The east suburb, the former Mahomedan quarter, is still completely in ruins, a relic of the last Mahomedan rebellion in 1895, when the city successfully withstood a siege by the rebels. The walls are particularly formidable and well built.

131 Hsining, as well as being the seat of a Taoyin and a Mahomedan General, has always been the residence of the high Chinese official controlling the immense territory of

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492 the muleteers now came to the rescue; and i
time all was in order, so that, apart from the
the feet and legs of man and beast were enc
sheath of thick mud, which gradually harden
consistency of plaster of Paris, no damage wa

241 The Sian plain is a fertile land, with vast wh
where in late autumn the persimmon grove
beautiful picture. The widespreading foliag
glossy leaves, symmetric in form, together
golden fruit hanging in profusion from the
boughs, are very distinctive features. The
food, also, was the best we had met with in C
before long we entered the pear-growing distri
Pinchow, where extensive orchards stretch for
all sides. Here, besides filling every chink
luggage with the pears, we considerably adde
elastic quantity known as 'hand-baggage,'
several days we pillowed our heads on lumpy
the fruit.

322 A few hours before entering the border of K
[443] passed a number of booths in which were sold
small articles carved from the wood of the ju
(*Zizyphus jujuba*), which supplies a fine quality
red wood pleasing to the eye, and so hard
346 almost indestructible. A plantation of th
surrounds a temple backed by enormous rock,
has been carved the figure of a gigantic sitting
After wandering around and between its huge
climbed the many flights of steps leading to
723 on a level with the prodigious face. This
forms one of a group of three colossal images,
of which, within Tibetan fastnesses, stands—
thrust forward—waiting for the appointed hou
must move towards his sleeping brother, repo
stretched, in a temple of distant Kansu. Him

3:Cable & French M-5 (1926) 1927
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largely attended, as many as eighty men and women registering in one locality. The majority were illiterate. We therefore considered it best to insist on all students becoming first of all proficient in the Government Phonetic Script, by means of which system an illiterate can be taught to read in twenty days. During the three years we spent in Kansu, five hundred and twenty-three pupils learnt this Script in our classes.

The villages of Kansu are often exceedingly poor, and in one of the places we visited the people had sunk so low as to be threatened with extinction by famine. A few miles away from this village the wide Heh ho—Black River—rushes out of a mountain gorge, its waters being then turned into the large irrigation-canals which convey them to the various districts. Quarrels, resulting in lawsuits between the principal villages, had led to the loss of their rights on the river by this settlement. For three years no water had been allowed to come that way, and as rain is so scarce in North-West Kansu no farming can be done without irrigation. As deep poverty seized these unfortunate people, opium-smoking became their only possible luxury, and they were soon plunged in unspeakable degradation. Dr. Kao, with a band of young Christian men, hearing of their miserable condition, paid them a visit. He found their irrigation-canal having been dry for three years was now completely choked with all kinds of débris. Apathy had fallen on the village elders, and the whole situation appeared hopeless. A meeting was convened, to which all the men came, and was opened and addressed by Dr. Kao. He told them of the love of God for each one of them, and of the saving power of the Lord Jesus Christ to free them from even the craving for opium. 'You must repent, pray, and work,' he said. 'We will now together acknowledge

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our sins to God, and ask Him to incline the heart of the Mandarin to restore the water to this district. Meanwhile, let everyone of you fetch his own spade, and supply my men and myself with tools, and we will see what can be done by clearing the canal in preparation for the water for which we have just been praying.' In an hour's time the preacher and men, having thrown off their coats, were digging hard, and repairing the channel. Two days later, Dr. Kao received a summons from the Civil Magistrate of Kanchow, requiring his medical assistance. Before he left the Yamen, the Mandarin said: 'What is this I hear about you and your men, digging out an irrigation-canal at Hehcheng—Black City? I really think something ought to be done for those people over there; as soon as I am rid of this illness, I will enquire into the matter.'

A few days later the water which so long had been withheld poured down the canal, and a new life began for the inhabitants of Black City.

On the occasion of our visit, they had just reaped their first harvest, and some were eating wheaten-bread for the first time in two years. Their homes were almost denuded of the necessities of existence. When we entered many of the barest farms, the women dared not descend from the *kang* to receive us, their rags only covering their nakedness while sitting huddled together, and girls of eleven years of age went about entirely unclothed. Yet even in this poverty-stricken place gifts of food were brought us daily—a few eggs; a bowl of green wheat steamed till the grains burst; a handful of garlic picked wild in the fields, or a bunch of the desert-grown, edible plant (Nostoc commune flagelliforme) known as 'hair-grass,' from its likeness to black human hair;—all these things and many others were presented to us in token of friendship and goodwill.

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these two faithful friends we had also two earnest Evangelists, who never lost an opportunity of recommending the Good News which we were there to proclaim.

CHAPTER XIII

THE CITY OF TEMPLES

WHEN not busy with village classes we made an opportunity to see the sights of Kanchow, which is a very remarkable town. The city wall is three miles in length, and from it a fine view of the well-irrigated, fertile land around can be obtained. This was sown with wheat, barley, millet, and more especially with rice, for which this district is famous, as well as with the opium poppy, and also peas and beans for animal fodder. Nearer the town were numerous fruit-orchards —pears, apricots, and apples—with vineyards which supply the market with both black and white grapes. The amount of water which floods this district from the melting snows is so great that many of the country roads become shallow rivers during the summer months. Looking down into the city from the wall, one's first impression is the beauty of the reed-filled lakes, and the number of splendid trees. From the midst of these the gay, glazed-tiled roofs of numerous temples appear, and a high pagoda built in Indian style catches the eye, but the dwelling-houses are low and insignificant. The roofs are flat and made of mud, and the houses are all very lightly built and obviously crooked, owing to the boggy nature of the soil which does not allow of a sure foundation. The largest temples and the Mission Compound stand on the higher ground of the city,

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The population, as in all these cities of the North-West, is largely composed of Chinese from distant provinces who hold the main part of the trade in their hands. The Kansu man is the agriculturalist, but each village-centre offers scope for the trading capacity of a Honan or Shensi man, who opens a small shop in which he does a large business as grain-merchant and money-lender. The farmer values the services of this fellow-countryman, who helps him out of many difficulties, but hates the oppression of the Tungkan or Huei Huei—by which name the Chinese Moslem is known. The origin of the Huei Huei is disputable; they are a vigorous race of men, to whom the Chinese Government at one time made grants of land. They entrenched themselves in South Kansu, were responsible for the Mohammedan rebellion and massacres, and though quelled for a time they have so reasserted themselves as to now hold many of the important official positions in the North-West. Their regiments are feared by the local people, from whom they seize produce, grain, and animals, requiting them with personal violence if they dare to question the right of might.

An illustration of the high-handed dealings of the Huei Huei is supplied by the incidents which brought one of our women students into the Christian circle. She, a young woman with one small child, was married to an elderly man, who was both an opium-smoker and a gambler. Their little home was in a courtyard which backed Dr. Kao's dispensary. Her husband, after losing all his money in a gamble with a Huei Huei, put her up as the stake, and lost. She came to know of this, and when her husband spoke of going away from home for a few days, knew at once that this was a prearranged plan for the Moslem to come and claim her. She had no redress nor court of appeal, so she

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~~Sinkiang AI-1~~

waddling of a small bear, but in flight they were superb.

It was not until after sunset that we drew near the first farm of the Hwahaitz oasis. The Suchow enquirer came out to meet us, and we found a room prepared for our use. The *kang* had been covered with a length of white cloth; a kitchen with firewood was at our disposal, and a meal was being prepared. But we were too tired to sit up and eat it, and securing a cup of tea, we lay down and promptly fell asleep.

We were up early, but not before the crowd had begun to assemble in the courtyard. After a breakfast of pancakes made of flour into which oil had been kneaded, and which we dipped into vinegar, we went out to see the place. The gates of the walled enclosure in which we were staying were already decorated with Christian posters, and the students were out choosing a suitable site for the tent.

The name of the place signifies 'The Flowery Lake.' The lake, however, after which it is named, proved to be but a small pond in which naked children disported themselves, and where the beasts of the local farmers were brought to be watered. The oasis is circular, large, and extremely fertile. The roads were bordered with poplar and willow trees, and the fields were sown with wheat, millet and flax. We followed the high bank of an irrigation canal, and passed the entrances of several large, prosperous and beautiful farmhouses. The locality is very hot by day, but exceedingly cold at night; at sunset the air hummed with mosquitoes, which, however, only lived a couple of hours before succumbing to the night chill.

We returned to find the site chosen, and the tent pitched. Larger crowds gathered even than at Chikinpu, and the sales of gospels were most remarkable.

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~~Sinkiang AJ-1~~

his own room and cared for him, and the subsequent doings of the day for the remainder of the party are best described in the words of the diary, written at the time : ' Ate, slept, got up, and ate again ; then back to bed for the night.'

The oasis of Petuntz—' White Tower '—formed a green patch in the arid surroundings. A delightful-looking stream gushed from the cliff and ran into a tiny canal which watered a patch of wheat and a small field of the opium-poppy in full bloom, which raised in us the hope for vegetables, but we found the water to be too alkaline to permit their growth. This property of the water we had, however, already discovered for ourselves, for our first instinct on arrival had been to run to the crystal spring and drink deeply from it ; it was, however, a most disappointing experiment, so that here we had to take our first lesson in self-control as regards drinking, for the advice of experienced travellers is : ' Where the water is brackish, drink the least possible, as the more you drink the more parched will be your mouth ! ' It was now we learnt the bitter lesson that that delicious beverage known to us as ' tea ' became in these places only a noxious infusion of tannin which left our lips dry, cracked and black. We found the only palatable way of dealing with desert water was to boil dough-strings in it, the flour and water absorbing the salts. We also, as well as all other caravans, carried certain drugs to administer to the mules as required, serious illness being frequently caused by their inability to assimilate the unaccustomed qualities of the water, human beings, however, as well as beasts who spend long periods in these parts, become at length accustomed to it, and cease to notice its bitterness.

The life of the few families forming these settlements

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The crumbled loam walls and the old roofless yamen and temple buildings lay bleak and desolate when we passed through. We were still merely crawling along at a snail's pace. In the interior of the city, in a corner of an old ruin, we brewed our tea once more before we traveled on into the night. In spite of our weariness, none of us wanted to spend the night here. The cold which set in anew after sundown was too intense. We preferred to fumble along across the barren steppes. Even though we were now going along a well-traveled caravan road, we had difficulty in finding our way in the dark to Schara khoto. We did not reach it until morning. We had covered 140 kilometers on our flight. All of us had sore feet from the solidly frozen riding boots, and the three rescued ponies were also near exhaustion because they were too heavily loaded.

Schara khoto (1) is today the farthest Chinese military outpost from Kansu. The Chinese government had stationed here a schu be (first lieutenant), a lieutenant and a few sergeants with 30-40 men (belonging to the green banner). They were armed with swords and matchlocks and a few old German drums and French horns. Thus, the detachment does not play a very important role. The soldiers even have difficulty defending themselves against the attacks of marauding Tiberans. There is an old wall but it is so large that it would take at least a regiment to defend it. There is also a large old parade ground. Between this and the city which is empty today there live about thirty Chinese families who cultivate a few small acres in the vicinity, raising barley and wild oats. Nothing else grows here. It is an unspeakably miserable spot.

One of the Chinese immediately received us very hospitably in his mud hut, and turned over his large warm kang to us. Without wasting any words he immediately prepared a few opium pipes for us, for the Chinese say this is the best restorative if one is over-tired. I was the only one who did not smoke and I did not wake up until the next night, whereas my companions, all of whom had smoked, walked about vigorously early in the day.

Two days later I traveled back to Dankar. On this stretch I was accompanied by fifteen armed men and half way to the city I was

1. A Mongolian name meaning "yellow city." The Chinese call the town Scha la ku to and say that this means "city of the green meadow."

city. He afterwards confessed that he never expected to see me again. My new undertaking seemed too risky to him. Above all, he felt that I had taken along too few people. I, too, was convinced that we were too weak, but my financial condition was to blame for that. The first night we stayed in Tschen hai pu and on the second day of our journey we reached Dankar. On the next stage I covered the 70 li up to Schara khoto. I had decided to take the road traveled by K'am traders as far as the Hwang Ho and the Ngolok country. I had traveled this road with Filchner in 1904, but at that time we did not know that this was a much-frequented way. It is the easiest route and the one on which it is possible to make the most headway.

On January 23 we camped in the middle of the Remo Yung (Mongolian: Ara Gol), a few kilometers from the ruins of Tsaghan tsch'eng; and on the following day we rode past the Bayan Nor and the South Koko Nor Mountains and at dusk reached the peasant colony of Tschabtscha. The weather in the highlands was clear and beautiful every day. There were only a few individual cumulus clouds that swept past us and over the dry, barren tala steppe that is visible south of Tschabtscha. At noon in protected spots the temperature went up to zero, and once it even went to $+2^{\circ}$; at night it cooled off to -26° and once it even went to -31°. It was bitter cold, for the wind never seemed to die down and it cut to the bone.

Although Tschabtscha lies at an altitude of 2,990-3,040 meters, a permanent village settlement has developed here and from year to year more and more Amdo-Chinese and Tibetans come here, among them many who have been guilty of some kind of mischief elsewhere. In answer to my question I was told that 250 families live in the scattered settlement. Most of them have come within the last ten years. Originally the land belonged to a Mongolian gung (duke) who today is in the Tsungkuk Valley near Gomba soma. Barley, oats, buckwheat, flax, even potatoes and some wheat are grown here. Three favorable months make this possible in spite of the northern latitude and the great altitude. One of the chief factors is the sunny, southerly position of the valley pocket. The village nestles in the declivity of the South Koko Nor Mountains between /100/ a few low foothills, and is protected from storms. Another factor is the loess that is quite thick here and was piled up because the South Koko Nor Mountains formed protected nooks into which the dust that was blown here from afar could settle. Finally, not the least important factor is the Tschabtscha tschü, a lively brook, that comes down from the mountains and can be utilized for irrigation of the fields, so that close

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beside the steppe, oasis-like, human endeavor has conjured up rich grain fields, and even isolated trees. Because of this stream the peasants have become independent of the spring rains and can make their seeds sprout when the steppes round about are still dry and dead. The inhabitants of Tschabtscha, Tibetan families who are emigrants from the Bayan rung district, as well as Chinese and Mohammedan families - the latter mostly rebels from the year 1896 who have since then wandered back from the Lob Nor but have not dared to come into Hsining - without exception enjoy a very bad reputation. I myself cannot complain, however. They invited me to pitch my tent on a barn floor, sold me grass and straw at a ridiculously low price and put my animals in an enclosed court. We stopped here for a day in order to have the saddling thoroughly inspected for the last time before crossing the uninhabited areas, although my interpreter Tschang implored me by all that was dear to me not to trust the peace of the Tibetans and to leave the ill-reputed town as quickly as possible. All during the day of rest he hid in my tent and begged and implored me not to let it be known that I had a yamen interpreter with me. He said that Tschabtscha never gives the Hsining government ula and the yamen interpreters are always miserably beaten up here.

Until shortly before my arrival 30 Horkurma-Ngolok with several hundred yak had a camp beside the town and from here they traded the yearly supplies of grain that were needed for the tribe, because, as "free Fan tse" the Dankar market was closed to them and they do not have a Hsiä-dia there and can only enter the city secretly and in small groups. These 30 are old acquaintances of ours. They were the same on whom the Wanschdäch' Tschabtscha tribe had played such a nasty trick in the fall.

Anyone who wants to become familiar with the creeps need only travel with a caravan in East Tibet. Already on the way to Tschabtscha our nights were very uncomfortable. Sometimes the dogs would not settle down for hours and kept dashing out into the dark steppe. During our stop-over in Tschabtscha we were dished up a lot of tales of robbers. When I tried to increase my little band for the next few days of the journey, I could not even get five armed Tschabtscha horsemen. They felt that five was too few and too weak a band for the return journey. So on January 26 I continued with my little group. At first we followed the large road that leads along the southern slope of the mountains to the Dabassu Nor. We had ridden about four hours when I saw a dot in the distance through my glasses. A very queer apparition was moving toward us. In the dancing,

area; the Hu lao Ho River must here wind its way largely through narrow ravines of granite and gneiss. However, even here most of the mountains consisted of red loam of amazingly large proportions. 133

The farther south I came, the richer became the soil. A day's journey north of Tsinchow, kao liang, rice, and cotton appeared and these fields interchanged with endless stretches of persimmon trees the sweet fruit of which hung fiery red on the bare, leafless branches, and presented a picture which we so often see on the colored prints of Japanese painters and which seem so unreal to us. Unfortunately, I was obliged to carry out my long endurance rides in the south during almost steady rains. 241

I found the city of Tsinchow (1,130 meters above sea level) very different from the rest of the Kansu cities; I saw practically no house in ruins. Most of the buildings are made of brick and stand in the midst of gardens and thousands of fruit trees. The city has a little more than 50,000 inhabitants, among them 4,000 Mohammedans. Here, too, however, the merchants complained of the inconsiderateness of the administration which was constantly creating unfair taxes and new difficulties for trade, so that a great many hangs which arranged transports to Han tschung fu and Szechwan, had to close up in the last few years. But even so the city is slowly growing. The houses are squeezed into five separate walls and even outside the walls there are living quarters and this makes a picture that is entirely absent in northern Kansu. In ancient times the city was called Tscheng schi hsien and the first emperor of the Tang dynasty was said to come from here. Not far to the north on a mountain lie the loess ruins of almost completely disintegrated remains of walls from the Han period like the walls of ancient Teutonic times, in which Duke Wei hsiao gun was said to have lived for a time as an independent ruler (25-58 A. D.). Today the plow leads over the site. The bad Fan li hoa is also supposed to have been born not much farther from the city in the present-day Fan kia tsch'eng, and the inhabitants maintained in all seriousness that within the district, in the market town of Be yang Chu, the descendants of the family of Ming emperors live under the assumed name of Tschang, formerly Tsche. 361

The city owes a large part of its fresh appearance to the fact that it happened to escape the Mohammedan disorders as well as the incendiaries of the Tai /326/ ping era. At that time the battles reached as far as Tsing ngan hsien and the latter as well as Tsing schui hsien in the north and Hui hsien in the south, all three of which